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THE PAST: ITS NATURE AND REALITY *

Comparatively little has been written on the nature and reality of the past — and what little there has been, has satisfied but few. In good part this is because an adequate account requires that kind of radical revision of the ideas of being and becoming, of possibility, fact, actuality and existence which can be given only inside an absolutely perfect and complete system — a system which unfortunately does not yet exist. Still, it may not be amiss to offer some suggestions as to the meaning and import of some of these basic ideas, particularly as they bear on the idea of the past.

Let us begin — as we must end — with the present. It is here that our problems arise; it is here that we find our material; it is here that we must look, sooner or later, in order to determine whether our solutions are sensible or not.

At least four important features in the present are to be distinguished: possibility, fact, existence and actuality. Each deserves some comment. Each helps us focus on some special feature of the past, and all of them together help us understand what it is, and how.

1. Possibility: A possibility is a universal, indeterminate, constant and intelligible unity which is specified and diversified by specific concrete occurrences. It has two distinct but not entirely independent meanings: it is a subordinate, abstractive element within things, and a preceding, conditioning factor exterior to them. As the first it is analytic, as the second it is

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ontological. The interior analytic possibility gives a present thing the status of a member of a class; the exterior ontological possibility provides it with a direction and goal. No occurrence can be understood without reference to both types.

Analytic possibilities are ingredient in every occurrence. If this be an actual green, then it is also an analytically possible green, an analytically possible object of vision and an analytically possible color. Every occurrence, too, has its corresponding ontological possibility, for nothing is unless it first could be. This green is now actual because it fills out, actualizes an ontologically possible green.

An ontological possibility is exterior and relevant to what requires it. Were it not exterior, there would be no results achieved in time, and no terminus would be prescribed for any action. Were it not relevant, beings would not have characteristic promises, and predictions and inductions would be without warrant. Yet a cat differs from an apple in part by virtue of the different things that are ontologically possible to them. Our predictions tell us what these possibilities are, and our inductions anticipate the manner and degree to which those possibilities will be realized.

Whatever is concrete and present has an ontological possibility exterior and relevant to it. That possibility is its future, to be made internal and determinate by the being as it strives through time to realize its promise. The result of the determination of the ontological possibility is a concrete occurrence at the next moment. That occurrence is novel in its concreteness, yet predictable as embodying a generic, promised, intelligible and formulatable ontological possibility. The analytic possibility which is interior to that occurrence is the ontological possibility as given a new location, new power and new functions by virtue of its being involved in the career of the being as here and now.

The realization of an ontological possibility involves the conversion of it into an analytic possibility in a present being. The analytic possibility of a present being is thus an ontological possibility for what is now past. Since an ontological possibility defines an object's promise, one can, knowing the nature of a present object, come to know the promise and thus the nature of its predecessor. Because it is analytically true that a cold

war is possible now, it is ontologically true of the conference at Yalta that it promised not peace but a war without guns. If peace had been promised in fact, we would have peace of some kind now, and not its antithesis.

Every present being realizes an ontological possibility and confronts an unrealized one. The unrealized possibility constitutes the present's relevant, exterior, ontologically possible future. The past, in contrast, is a domain of realized possibilities followed by realized possibilities. This is so because the ontological possibilities which once confronted the past are already realized in concrete beings, in which they assume the role of analytic possibilities. With the passage of time therefore something is lost and something is gained. By becoming realized, ontological possibilities lose their position as independent realities over against present beings, but gain the role of analytic possibilities in those present objects. And, as we shall immediately see, they are then also made determinate in the guise of settled facts.

2. Facts: What is concrete and present realizes an ontological possibility, exemplifies it in the form of an analytic possibility and makes it determinate in the shape of a fact. A fact is an ontological possibility as particular and determinate; it is a definite unit of being, bounded off from other units. Unlike a possibility, it is subject to the law of the excluded middle: every predicate or its negate applies to it. The letter I will possibly write tomorrow is neither long nor not long. But the letter that I have in fact written is either long or not long. Until the letter is written it has no length; it can have a length of a definite magnitude, a length in fact rather than a possible length, only when it in fact is, and thus only when it ceases to be an indeterminate letter, a possible letter, and becomes instead a determinate letter, a letter in fact. The writing of a letter is the transformation of a possible letter into the fact of a letter with a definite, completely determinate length. Until the letter is written it has no definite length; its length, like itself, is indeterminate, a possibility to be made determinate through action.

Nothing occurs in a fact; there is no ongoing, no change, no happening there. It is a structure without duration, a meaning without substance, without room for any becoming within

it. The second world war is now sheer fact, crowded out of place here and now by the present. That war is not being perpetually fought at some past period of time. It was fought once and once only. The past time when it was fought contains the fact of it, not the actual fighting of it, the victory not the activity of winning, the deaths not the dying, the structures of things not the processes by which those structures came about. Were this not the case, the past would contain becoming as surely as the present does, and energy would be increased with every tick of the clock, for there would be energy then as well as now, and it would be forever and ever in exercise. The past would not be settled: it would not be crowded out by what is now occurring. It would be like the present in every way except that of having a different date and of being less available to us, features which are external to the facts and theoretically replaceable. But the past is intrinsically quite different from the present. It is inert, ineffective, finished, lacking substantiality and energy.

We may not know just what happened in the past. This does not, however, make the facts in it any less determinate than they would be if we did know what happened. It is now true or false and will be so forever that the second world war was fought with guns, cannons and bombs. The fact will have many effects through the corridors of future time; it may well have a different import as time goes on, in the light of what follows after it. But this does not mean, as Mead thought it did, that the past is a kind of function of the present, changing in accord with it. Like all the rest of us, Mead was forced again and again to acknowledge that there is a past to be so altered. The meaning of my childhood undoubtedly changes as I grow older. It looks somewhat rosier now, and some of the incidents. which until now I thought were inconsequential, begin to loom large, and are shown, by present occurrences, to have a different significance for me than they once had. Indeed, it is this very fact, that I was once a child, which Mead's theory must perforce and should gladly acknowledge as the inescapable referent at which the changing relations instituted by the changing present terminate. To deny a fixed factuality, unconstituted by the present, is to affirm that the past has no being of any kind until its future occurs, and that the future must then somehow unnecessarily produce the past as a tail to be projected backward by us into a time that had never been. It would be hard on such a view to see why we had the idea of the past at all; how we could ever be in error regarding the past; how we could ever have anything to refer to in history or through memory.

Because fully determinate, a fact cannot be altered. To alter it would be to destroy it, for a fact is determinately what it is, nothing more or less or other. If it could be altered, it would no longer be that which was settled, done with. Anyone who tried to change a fact would have to face it first as a datum, as an unalterable fact, as a to-be-changed-fact, and that which he faced would forever remain what it is. One could substitute some other fact for it and speak of the substitution as a change in the fact, but strictly speaking the fact would be left behind entirely unaffected. Nothing then can change a fact in the slightest way; nothing can be added to it; nothing can be subtracted from it. It is what it is, ultimate, final, brute. It is such unalterables which make up the past, for the past consists solely of settled, determinate, unalterable specifications of what was once merely ontologically possible. It is a tissue of facts, beyond the reach even of omnipotence to change. It cannot be undone by any power, for, as Agathon, Aristotle 1 and many scholastics saw, even omnipotence stops short of what is impossible and thus short of changing what cannot be changed. And in any case, it would always be true that there was once this or that which had been changed and thus, even on the supposition that the past had been changed, it would be true that there was a past beyond all change.

Mead is surely right in urging that the meaning, bearing, the import of a past fact may change. And he would certainly be on firm ground if he maintained that past facts do not exist, neatly demarcated, substantial and self-enclosed. But still, the past is no artifact. Nor is it produced by thinking of it. There are diameters without number in a circle, all with fixed natures, properties and implications, but until we mark them out by drawing them or other means, they do not have the status of factual diameters. They are determinate and real in the sense that their natures and properties are beyond our power to alter; they are not yet determinate and real in the sense of being distinctive before we isolate them. Just so, the

¹ See Ethica Nicomachea, 1139b 9-10.

past is fixed beyond our powers to change, but none of its items stands out separate and distinct until we focus on it later. The factuality of the past, its having been precisely and in full detail this and not something else, can never be changed, no matter what comes after or what there be which overarches all that occurs in this world. Isolating, focussing on a past occurrence makes a difference to it in the sense of giving it a being and a meaning, a place in the world of present realities it otherwise would not have; but this does not affect its factuality.

The past is a tissue of facts and nothing more. These facts are excluded by present facts. Now, to exclude means that there must be something to exclude. Since what altogether is not cannot be excluded, the past, because excluded by the present, must have some being apart from the present. The present then does not perish utterly when it passes away; its factuality remains, excluded by what follows. This does not mean that the past somehow stretches behind the present world, that we trail behind us, in an endless temporal extension, what already had been. Facts are not ultimate realities, but partial beings dependent for their presence and meaning on something more concrete than themselves. We can date them and locate them, but they are themselves not loci. The fact that we have a war of a kind right now takes up no more space or time than does the truth that we have a war of a kind right now. It will always be a fact that at this date there was a war of a kind, but this fact will take up no more room later than it does now. What takes up room is men and women, going about in their customary ways with their guns and warplanes ready but neither aimed nor used.

3. Existence: What is past is inert; what is present is active, crowding out room for itself. Present things are insistent, demanding, assertive, existent. Because both the past and the future lack an existential element, they contain no passage, have no becoming within them, are less concrete than and finally cannot be understood apart from a reference to the present. The present alone is the locus of becoming, and this by virtue of the restless movement of its existence.

Those who hold that time and change are illusory, and who therefore seek to identify the real with an unchanging absolute, a four-dimensional continuum or with eternity, sup-

pose that they can get along without the acknowledgement of this element of existence, active, effective, transitory. But since they are then forced to give up occurrences of every kind, they must deny themselves the opportunity to engage in the act of giving anything up. To deny all becoming is to be embarrassed by supposedly illusory occurrences and the fact that they are being seen through, and therefore presumably abandoned for better and steadier realities. To deny becoming is thus to illustrate it. To acknowledge it, on the other hand, is to acknowledge existence as outside but correlative with present fact.

There is nothing in a fact that requires it to be at this or that time. That is why it is always significant to ask when it is that such and such a fact occurred, and why. That is why a fact can be present now and past later. To know when a fact occurred is to know when existence was coordinate with it; to know why it occurred is to refer to existence as that which made the fact come to be.

Existence is not the negative of fact; it is not something alien to it. Nor is it unintelligible. We need not take a Kierkegaardian leap from cognizable facts into a morass of unrelated unintelligibility in order to grasp what realities are and how they come to be. Existence is the totality of all facts before they have been produced. Connected with, but more than any fact, existence is now the source and guarantee of further facts to come. It can be exhausted in nothing less than the totality of facts — which is to say, when there is no more present or future, but only past time.

To acknowledge a fact is to refer to an existence beyond it. If the fact is present, the reference is to a coordinate power by which a future possibility is being turned into a determinate subsequent fact. If the fact is past, the reference is to a power coordinate with some later, excluding fact. When then we say that x exists we but say that x is present, that there is an existence coordinate with the fact of x. When we say x existed we but say x is past, that there is an existence coordinate with a later fact. It is one and the same thing to remark, "it is a fact that a is b," "it is a fact that a is b at some time or other," and "it is a fact that a is b has existence at some time or other," the

latter two assertions making explicit that there is an existential correlate for the fact, "a is b," which is or was coordinate with it and without which it could not have come into being.

As time goes on, more and more facts become past, and more and more therefore are the intermediaries between a given past fact and the existence to which it belongs. The past in a sense therefore is constantly growing, even though no fact within it is ever changed. The increase of facts in the past necessitates more and more relations connecting older facts with newer ones. These relations are produced when and as the new succeeding facts are. A function of the new facts, they in no way alter the old. Existence as it moves on provides the facts it leaves behind with more and more successors, which remain exterior to and without affect on their predecessors.

The question, "Why is it that this rather than that fact is the case?" arises because existence is not integral to fact. No fact justifies, accounts for, grounds itself. Why then does it occur? The question can be dealt with in one of three ways. We can say with Hume that it admits of no answer; we can say with Malebranche that it is to be answered by referring to God, or we can take a naturalistic approach, and in consonance with the scientific, metaphysical and historical appetite of man, answer it by looking to the past for that act of existence by which what was once possible was made into what is now determinate and present. The last, I believe, is the only alternative open to us, as a glance at the other views will, I think, make evident.

According to Hume, each impression is a distinct existent. There is nothing before or after, he thinks, which could account either for facts or their existence. His theory supposes that fact and existence make a perfect unity, in face of the difficulty that there can be existence outside of facts (the existence by which present fact gives way to future fact), and that there can be facts devoid of existence (the facts of the past). His is a doctrine that this is a world of perpetual miracle in which ultimate occurrences follow one another without necessary order or relevance. He not only has to abandon commonsense, but he can make no room for science except as a congeries of guesses as to what will be, and can find no place for history except as an imaginative portrayal of a past which has no

reality whatsoever. For him, the past is a realm of non-existence which evidence in the present apparently forces one to believe to be real. But what we are forced to believe is real, no theory should try to make us say is nothing at all.

Despite Hume, existence and fact are distinct. That this rather than that fact is present is a truth which cannot be ascertained by examining the facts alone. This consideration has been underscored by Malebranche. He, however, thought that existence is somehow bestowed on things here and now through divine action. By thus denying existence a natural habitat and career, he denied that anything had substantiality of its own. Whatever is, he was forced to affirm, can be here and now only because it is sustained by a power outside the natural world. This is a strange view for a theologian to take, since it so evidently denies that God created anything but the most impotent, puny and dependent of things, which He irrelevantly vitalizes from moment to moment, and only as long as His pleasure in this odd handiwork of His happens to last. Malebranche's view would make us deny freedom, will and creativity to men and other beings. In the end it requires Malebranche to cancel himself and all his works. for if all is God's doing, nothing is man's, and there is no place for responsibility, sin, will, or the writing of books of philosophy.

Malebranche's is not a possible view for one who takes experience seriously, or who refuses to end his philosophic career with a precipitate acceptance of irrationalities. Here and now we encounter passage, and therefore know that some facts at least have an existence which they inherit from what had been. Here and now we know that some things have a future which they are in the process of realizing. If we suppose with Malebranche that present existence must come directly from God, we reaffirm the doctrine of perpetual miracle, characteristic of Hume, though with a different tone and for quite different reasons. Hume thought that there was no disproportion between fact and existence, indeed that they were inexplicably one, whereas Malebranche thought them to be radically discrepant and went on to explain, as on his hypothesis he must, their togetherness as the outcome of a direct exercise of an alien, divine power. Neither he nor Hume allowed existence to be at once independent of fact and natural to this world. Neither therefore made room for history or for natural action, interested though they were in both.

An adequate account of the occurrence of a present fact requires reference to past facts. This still would allow for the possibility that existence as a whole, or "at the beginning," might be a product of a divine non-temporal act. In the Garden of Eden, presumably, there were trees of different heights and girths, possessed of different numbers of rings. There were trees which were in bloom and others which bore fruit; there was short grass and long, calves and cows, eggs and birds beings at different stages in a life cycle. Adam could have asked of any and all the reason for their existence. Noting the difference between young and old, he would have had, as a natural and rational man, to account for the beings by referring backward to a time when they were younger. If, instead, he wanted to look upward to a creator, he would first have had to overlook the difference between the young and the old and then treat them all as possessing alien existences. We today could also, in a similar way if we wished, ignore differences in age, overlook the fact that different beings seem to be at different stages of a typical career. We could suppose that the entire universe had been created just a moment ago with all the evidence, supposed memories and testimonies we find in it. We have no warrant though for making such an abstraction from the fact that beings seem to be at different stages of a typical career. We gain nothing and in fact lose much by equating all beings and then subordinating them to a creating God. Indeed, our very effort to do this requires us to suppose a God is one who tries to keep us from knowing Him. The universe now, as in Adam's time, is a place in which things present themselves as at various stages in typical careers, leading us to infer that they originated at different dates in the past. If the universe were created either in Adam's time or in any other, it was filled with what purported to be historical evidence. He who placed that evidence in the world would be one who tried to make us disbelieve in Him, since He would ask us to look backward in time instead of upward toward eternity. If existence had a supernatural origin, it was produced by a being who apparently seeks and is strong and wise enough to evade us. We then have no reason in the nature of things to refer to him. If we tried to refer to him, we could not possibly find him, since all the evidence irresistibly points away from him.

It is our intellectual obligation to do justice to the evidence. The evidence we now have tells us that what exists originated in the past. If that evidence is utterly untrustworthy, we could never know that it was, for knowledge of its untrustworthiness requires a knowledge of something which is really the case inside an historic frame. We therefore have neither the power nor the right to infer that whatever existence there is had been provided by a supernatural being, be he God or devil. We must explain the occurrence of present facts by referring to past ones and to an existence which, in accord with the known laws of nature, has come to be coordinate with present fact. But this we cannot do unless we can show how the past, despite its abstract nature and necessary reference to present existence, can stand apart from the present as a fixed and unalterable reality.

4. Actuality: Possibility, fact and existence are abstractable components of concrete, unitary, present realities. They have natures, functions and implications of their own, with power enough to enable them to stand outside the present moment. Possibilities dwell beyond the present in the form of relevant and exterior prospects; facts exist outside the present as items in a settled past; existence is in a perpetual movement away from the present, to produce the facts which succeed and replace what is now present. All three facets are in a sense too big for the present beings that provide them with locus and substance. Every possibility applies to many things, besides that in which it is embodied, defining its embodiment to be one of a kind; factuality never dies and thus is outside the corroding time characteristic of all present beings; existence is continuous with an existence outside the confines of any present being. Despite all this, there is a basic sense in which all three are integral to present beings and form indivisible unities. All three fit snugly together as constituent parts of single, seamless, active actualities, here and now.

An actuality is a unity in which possibility, fact and existence make up a single, substantial ultimate whole. It is at once determinate and changing, completed and completing, abstract and effective. It faces and is never entirely sundered from an abstract, indeterminate, future ontological possibility. To become conscious of that possibility is to become conscious of the promise of the actuality and its need to exercise a power which will make that possibility determinate. It is to know what the area is within which the actuality can make determinate, present and concrete what is as yet indeterminate, future and abstract.

Each actuality reaches to the future in the effort to make its exterior and relevant possibility one with itself. In that act it forges a new unity of possibility, fact and existence. This does not mean that it perishes only to be reproduced somehow in a similar form. The actuality persists through time while it is engaged in the act of making an exterior, relevant future into a present fact. Nor does it mean that the actuality succeeds in encompassing all existence within it. If it could do this it would become perfect and static. There is always some existence outside the borders of the actualities that make up the concrete stuff of the world. Internal to actualities, existence is external as well. Were there not more to existence than is contained in an actuality, there would be no space, no relations to other actualities. The existence exterior to an actuality is indeed so obtrusive and extensive that it is in fact hard to avoid the temptation of saying that existence forms a single, seamless whole and that different actualities are small segments of it, focussed on by us for a moment or so. If we were to yield to the temptation, we would reify mere existence, give it a being of its own regardless of whether or not anything in fact exists. But it is more correct to say that each actuality has its own existence, and that this existence is continuous with a common cosmic whole of existence ouside its borders. In any case what is important to note is that there is existence external and internal to every actuality. Because there is external existence, an actuality is incomplete, subject to contingencies, and sustaining relations which no knowledge of the actuality could enable us to determine. Because there is internal existence, an actuality is capable of change and movement and is beyond the grasp of a mere intellect operating apart from all experience. And because existence is both external and internal, the past can exist apart from the present.

The past has no substantial being of its own, since it is nothing more than a tissue of facts, derivative and dependent. Still, it is not an element inside the present, somehow overlaid by opposed facts. Were that the case, the past would change in meaning at every moment, and a present object would be subdivided into countless subordinate and antagonistic facts. Nor is the past a fresh creation, forged by thought out of present actualities, for the past is not dependent for its being on the minds of men. The past is exterior to and unaffected by the present.

The past has a being of its own; it is fact as pushed aside, repulsed by present fact. But what then sustains, what supports, what provides substance for it? Whitehead and Hartshorne answer, "God." To avoid affirming that God keeps past evil in existence, however, they are forced to suppose that God gives being only to that portion of the past which can be made part of a cosmic harmony. Their theory requires the supposition that when God preserves the past he dislocates it from the present and purges it of its follies. But then something occurred, to wit past evils, which God does not preserve. Also, whatever part of the occurrence that God does preserve is preserved by Him on His own terms. Subject to His transformations, it may follow principles which need have no necessary bearing on what was and is going on. Detached from this world it would become pertinent to it only through a fiat which somehow undid what the supernatural being was asked to do originally.

A support for the past should not compromise the relevance of the past to the present; it must preserve every fact whatsoever, the good as well as the evil, and do this without recourse to a being whose existence is doubtful, whose operations and aims are unknown, and who lays hold of the past only by wrenching it loose from its bearing on present existence.

The past stands apart from the present as a distinct, recognizable, abstract and settled element. It is distinct from the present because excluded by present fact; it is recognizable through the agency of analytic possibilities in the present, for these are ontologically relevant to it; it is abstract because it lacks the existence characteristic of actualities; and it is settled, because it cannot be joined to that existence which is outside

actualities and thus cannot be affected by the adventures which that exterior existence promotes. No one of these determinations of the past goes the length of providing the past with its needed prop. Possibility, fact and existence are themselves abstract, needing actuality to be at all. Actuality in turn, though substantial enough, cannot sustain the past, since this is excluded by and excludes the actual. There is nothing left but existence so far as it overflows the borders of actuality. This is ultimate and concrete enough to support what is abstract. But it is directed not toward the past but toward the future. Outside the borders of actualities, marking them as incomplete, restless and needing something, existence directly sustains not what was but what can be. It can sustain the past not directly but only through the mediation of the future.

Actualities seek to possess the existence which lies outside them. Their need for that exterior existence isolates an aspect of it. That isolated aspect is nothing more or less than the actuality's future, its exterior ontological possibility. Since whatever that possibility involves must also be exterior to the actuality, and since the analytic possibility of the actuality is related to the future as a part to a whole, the analytic possibility also must be exterior to the present actuality. The analytic possibility of this piece of wood then, despite its exemplification here and now in this piece of wood, must have a status apart from the wood by virtue of its connection with the exterior future. And since a fact is wherever its analytic possibility is, the present fact must also be exterior to the present actuality. The ontologically possible future thus enables present analytic possibilities and facts to have being apart from what is now actual. Since a present analytic possibility is an ontological possibility for a past, and since a present analytic possibility, through the help of the future, stands apart from the actual, it makes the past, which it entails, stand apart from the actual too. Past possibilities and facts are dependent on present possibilities and facts, and these in turn depend on the future. That future is a facet of existence, exterior to but continuous with what now is actual.

The past stands apart from the present because the future is exterior to the present, forcing what that future involves to stand apart as well. Cut out all reference to the future and

you cut out all reference to possibilities and facts as distinguishable and functioning factors. Each thing as a consequence would be unique and individual without also being an instance of a universal, and there would then be no fact pertient to and yet excluding a past fact. The universal "a man" stands apart from each actual man because it is inseparable from a prospect of mortality characteristic of existent men. The universal in turn presupposes a past fact. Since that universal is exterior to a present actuality, it compels the past fact which it presupposes to stand outside that present actuality as well. The past thus has a being outside a present actuality because it is presupposed by an exterior analytic possibility which in turn is presupposed by an exterior future. The past thus has being only when and as the future does.

The distance between past fact and present fact is the concern of history. The historian comes to know that distance only so far as he knows what the past fact is, the kind of existential power with which it was originally coordinate, and the transformations through which that power went in order to be coordinate with present actuality. He knows none of these with surety and can hope for nothing more than a plausible account. It is his task to make reasonable the supposition that such and such had been the source of and the career of existence. The fact at which he stops is not final, having its own antecedents, but it is correct that he stop there so far as it is a fact for which the present analytic possibility is a relevant, exterior prospect. He does not construct the past out of the present or future; he reconstructs it, looking to the present for his evidence and to the future for an ideal which will enable him to know the past as it existed apart from him. Using a present possibility as a clue to what the past was like, he tries to show how earlier facts compare with and perhaps account for later ones. The exteriority of the future to the present guarantees the exteriority of those past facts from the present, and thus quarantees him a past to know and about which he can be mistaken. A knowledge of history presupposes a grasp of the nature of present things which in turn involves a grasp of ontological possibilities, their relevant antecedent possibilities and facts, and the route by which those antecedents gave way to what is present. By comparing and interrelating his past and present facts, he is able to note the contours and to measure the force of existence, for facts are the ashes of nature, marking the extent and effectiveness of that perpetual fire of existence to which all owe their presence and their eventual departure.

In memory we begin not with a present fact but with an idea. That idea has a degree of determinateness less than that possessed by a fact, yet more than that characteristic of an image; it is beyond our power to produce. (The line between memory and imagination is not entirely clear in part because we are never sure just what degree of determinateness marks off the one from the other.) Only a fact will account for that degree of determinateness, and we tend therefore to refer the idea to some fact. When we find that present facts cannot accommodate the idea, we are forced to refer it to some time in a past, exterior to the present, in which such facts could occur.

Let us try to summarize by paraphrase: Future, present and past possibility form a single whole of possibility; past and present fact form a single world of fact; existence makes one restless, surging whole. Each realm has its integrity, but each also is rooted in the present, forming unitary actualities there.

The past is existence recovered through the mediation of the future. It is exterior and relevant because one's future is exterior and relevant. That future is exterior because it is a facet of exterior existence; it is relevant because it has been made so by actualities, concerned as they are for what they lack. Without a future, at once exterior and relevant, an actuality would be but a momentary unique being precariously afloat in an alien sea of sheer existence. Concern for existence gives the actuality a future and this in turn distinguishes the being's factuality and possibility and enables it to distinguish the past which is relevant to it now. There is a past thus because existence is too big for present beings and yet adequate enough to yield us a future and whatever else this involves.

PAUL WEISS

Yale University.



SOLIPSISM

There are two common attitudes towards Solipsism to which all serious philosophers should object. One is that attitude which takes it as a fictional speculation, a convenient way in which the adolescent mind may pleasantly day-dream; the other is the related attitude of those philosophers who dismiss the doctrine with as much levity as the adolescent holds it. It is all too common to find thinkers, in other ways profound, satisfied to speak of Solipsism as a ridiculous, impossible, or technically "silly" doctrine, without giving adequate reasons, often without giving any reasons at all, for so defining it. Unless he is prepared to be a thorough-going intuitionist of a rather unphilosophical type, unless he is prepared to accept or reject doctrines on the basis of their personal appeal to him, no philosopher should reject Solipsism without discovering valid grounds for that rejection, nor, failing to find such grounds, should he refuse to accept that solution as his solution. Solipsism should be considered in exactly the same way as any other solution of metaphysical problems and treated with all the seriousness and respect which is accorded to any doctrine. In philosophy, as in courts of law, a doctrine is not to be outlawed until found guilty.

Every man experiences dreams and imaginations, the nature of which is admittedly subjective. It is perfectly possible for me to propose that this same lack of objectivity may characterize all experience. I may conceive that I am a god making the world for my own amusement, being real beyond the reality of this my dream. But this imagined god-head is merely the dream of an idle moment, for I cannot seriously suppose that were I to dream I would dream in exactly this way. Had I the making of this world, it would be a braver, better world than it is. Braver? Better? On second thought, I am not so sure. I would want it to be a better world, but could I make it a better world? Could I spin from my imagination the grandeur and beauty of the universe of stars, the wealth and complexity of the invisibly minute, the beauties

of nature, the truths of mathematics, the harmonies of music, the world of meaning everywhere? Could I? I doubt it. For I fail to understand even trivial things: I find myself failing even in unimportant projects. And if I fail in these, the least parts of my universe, could I so ably create the whole? There are, thus, two ways in which this doctrine fails to do more than amuse me for the moment. Did I create this dream, I would aim higher and achieve less.

To the first of the points offered above, the Solipsist has a possible answer. If I liken this world to a dream, why, that dream need not be a pleasant one, but wholly or partially a nightmare; and experience of dreaming shows how little our desires control even our subjective creations. Whatever my life be during the day, should I not make myself happy for that part of my existence which only I control? And even when awake, should not my imaginings of the future be painted always in rosy colors? But it is not so. That possibility of future illness which I cannot avoid makes me miserable today. although I fully understand that my present misery benefits me not a whit, that I should forget that future and enjoy what is left to be enjoyed. How often man faces such problems with the philosophy of "eat, drink and be merry, for tomorrow we die!" And how constantly he achieves but a hollow show of merriment! If this whole world be my dream, even then there is nothing strange in that it is as bad as it is; I am fortunate, perhaps, that it is no worse.

How far does the analogy drawn by the Solipsist truly hold? After all, the dream is a subordinate world in a larger universe, and its internal inconsistencies may be explained in terms of that larger entity. A nightmare may result from the physiological effects of indigestion, or the rush of blood due to the position of the body in béd; or the unpleasant dream may result from the fears and perils of the waking life, lingering on to harass our dream world. So also, for the evil imaginings of waking life. If I fear for the future, it is because life threatens me with future perils. That is easy to understand: but if I created this world, would there be future perils? If I dreamt this dream without the evil influences of fears left from day-time experience, without the influence of physiological

malfunctionings, there could then be no reason why that dream should be less than the best I could imagine it. A nightmare caused by external factors is one thing; a nightmare produced wholly by my own volition and imagination is quite another.

But the extent and complexity of the universe are not the only reasons why I cannot think I created it. The universe is in part unknown to me, a thing totally inconsistent with its being my own fabrication. Of course, it might be thought that this appearance of being partially unknown is illusory: that, in fact, only that much of the universe exists as I at present know, and that what I discover in the future I will invent as I go along. This seems intellectually unlikely. To me, reading a book is so much simpler than writing one; learning a mathematical principle so much simpler than discovering it through my own researches.

But there is another and more conclusive reason why I must admit the existence of something unknown to me. I frequently experience phenomena without appreciating the laws governing their behavior. Not being an astronomer, I yet notice the phases and eclipses of the moon, the appearance of planets, the phenomena of tides. Later on, when I study astronomy. I discover (or as the Solipsist would have to say, I invent) laws which accurately determine the nature of the phenomena I have already experienced, and the precise instant of their occurrence. Their occurrence must, therefore, have been determined by the law, yet the law apparently had not yet come into existence. I must, therefore, assume that at the time I discovered the laws I did not really discover them, that they had previously existed in my consciousness but that I had forgotten them. At some time in the past, then, I invented the laws of gravitation and magnetism, the quantum theory and the Einstein theory, all the rules of chemistry, biology, sociology, economics; I made the solar system, the galaxy, and many galaxies which lie outside our own; I developed the civilizations of the Egyptians, the Greeks, and the Incas, to say nothing of those of the Hottentots and the Maori; I wrote all the works of literature, philosophy, mathematics, poetry and drama now in existence as well as all those that will be written in my lifetime: I invented a great number of foreign languages and whole literatures in them; I made, in fact, everything which I might conceivably discover in the course of my life, and worked out every principle that I might conceivably think of in the course of my life. Having done all that (I do not know how long it took me), I then proceeded to forget all about it, only recovering the knowledge gradually in the course of my present lifetime.

Now it is hardly necessary to point out some of the startling implications of this doctrine and the difficulties they involve for the theory of Solipsism. I have no slightest remembrance of any such glorious history. It hardly seems in character for me anyway. If there was at some time a person who did all these things, on what basis can I identify that person with myself? Not on the basis of character and ability, surely; not on the basis of an experienced metamorphosis from one to the other; not, either, on the grounds of memory, for there is a complete hiatus of memory. No, if I started with this theory, I would be bound to conclude that that person who invented the universe was not myself, but a very superior person whom we may for convenience call God.

But in any case would not a thought once forgotten be completely non-existent? If I invent the principle of gravitation and then forget it completely, does the principle of gravitation exist? It seems evident that I must resort to some bearer of reality, the existence of which continues despite my forgetfulness. I might assume, for example, that the creator suggested in the previous paragraph continues to exist after the inauguration of my own being, to continue in existence the universe he created by thinking. Or, I might assume that the principles and entities involved in the universe I created, persist in my subconscious mind. But, then, this subconscious mind is an entity that has no noticeable relationship to myself, and I might with greater justice call it God. Or, finally, I might assume that the entities I created by thinking of them, continued in existence after I ceased to think of them despite the fact that no other mind existed in which they might be. But this, then, would be a universe of matter, created originally by that self of mine that was not I, but God.

It is difficult upon the basis of Solipsism to account for birth and evolution. On this theory, I am completely unlike

any other entity, since every other entity is my own idea. Therefore, the fact that other persons die is no reason to suppose that I shall. The Solipsist is immortal. But, if the Solipsist thus easily disposes of the subject of death, how is he to deal with that of birth? His memories of personal experience have a term in anterior time. How, then, did they start? Are we to assume that the Solipsist before this life had another life, another dream, another universe? But if so, what caused that universe to cease? What in that universe was the cause of this one? And why am I completely unable to remember the prior universe? Similarly with all explanations which to the non-Solipsist concern his own existence, such as the phenomena of birth and death, the conditions of living. and the origin of man: whatever explanation the Solipsist imagines as applying to those men who are characters in his dream cannot apply to the dreamer himself.

The solipsistic position is not the last stage of the logical evolution which produces solipsism. The denial that matter exists inaugurates a logically compelling series of considerations that leads us to deny more and more things. If our perceptions of the material world are to be taken as existent, but not as valid indications - that is, if they are real but not true we are forced to apply this same criticism to other elements of our experience. I have ideas of matter, but matter does not exist; I have ideas of other persons, but other persons do not exist. Now we come to the next step: I have ideas of past experiences; on what grounds can I believe that those past experiences did, in fact, exist? I have memories, of course, as ideas of past experiences. But, then, likewise, I have perceptions as ideas of physical objects. The fact that I have an idea is not to be taken as any guarantee that the object of which it is an idea exists. Thus, the universe narrows down upon me. I live not merely in a world exclusively of my own ideas. but in a world where time is no more real than space. The past does not exist, only my present idea of past experiences. The future will not exist, only present anticipation of future experiences. The universe consists exclusively of those ideas which I now have.

And the end is not yet. For if I narrow down the universe to my present thought, then there is no such thing as logic.

There can be no sequence of ideas, no idea can be produced by reasoning from logical premises, and consequently no idea may properly be termed rational or irrational, correct or erroneous. Those ideas which exist, happen to exist; that is all. Consequently, nothing is true; or equally, nothing is false; and we reach the position of absolute scepticism. But, if nothing is false, neither are those philosophies which deny Solipsism; and if nothing is true, neither is Solipsism.

LAURENCE J. LAFLEUR

University of Akron.

PLATO'S DIVIDED LINE

The diagram of a line divided into segments with which Plato closes Republic vi.1 is a standard starting-point for discussing Platonism. The philosophical interpretation of the diagram has seemed so clear, that philosophers in general have been unwilling to attach importance to the fact that taking Plato's statements about it in any normal sense,2 the figure he describes cannot possibly be constructed.3 Since the diagram as they visualize it is so useful and clear, philosophers seem to have assumed that textual problems relating to its exact details are the result either of carelessness on Plato's part, or of later textual corruption, and therefore not of any philosophic importance. During the nineteenth century, this assumption was strengthened by the assertions of philologists that Plato was not serious when he wrote "mathematical" passages into his text, and did not attend closely to details which might conflict if a passage were treated too seriously. Further, a glance at a critical text shows that the direction for constructing the figure at Republic 509D.7 is not the same in all manuscripts. and has been emended by modern editors. However, a study of Plato's "mathematical" passages, some preliminary results of which are cited in a note below, demonstrates that great care and precision went into Plato's construction of mathematical imagery; and a scrutiny of textual variants and emendations shows that none of them resolves the problem of impossible directions for the figure. In the following discussion, it will be shown that there is an impossibility in Plato's figure; and that there are philosophical reasons we can suggest which fit the assumption (which alone is left if carelessness and textual corruption are eliminated) that Plato deliberately put

¹ Republic 509D, 534A.

² This qualification is needed, for reasons discussed below; but no translator has ever hit on a rendering of the normal sense of Plato's text that avoids the difficulty.

³ Philologists have always known this, but philosophers (except for Warner Fite, who bases an unfavorable estimate of Plato's mathematical skill on the passage) have somehow managed to ignore it. See citations in following notes.

this discrepancy into his text, or at least deliberately allowed it to remain there.

The directions for constructing the figure are to take a line cut into two unequal parts, and cut each part in the same ratio.⁴ The proportions of the lengths of segments to one another will then represent the "relative clarity" of each of four kinds of knowledge,⁵ and Book vi. closes with a summary of these proportions. If we letter the four segments from top to bottom a, b, c, and d, their relation is a:b:: c:d.⁶ From the context, it is quite clear that these four segments are unequal.⁷ However, if any line is cut in a ratio m/n, and its segments subdivided in that same ratio, two of the resulting segments will be equal, and their ratio 1:1.⁸ However, this is the construction explicitly given in the directions.⁹

a / b / c / d Suppose a line, x, three inches long cut into segments m and n, with m=2 inches, n=1 inch. If m is again subdivided in 2:1 ratio, a will equal $\frac{1}{3}$ m or $\frac{1}{3}$ inches, b will equal $\frac{1}{3}$ or $\frac{2}{3}$ of an inch. If n is cut in the same way, c will equal $\frac{2}{3}$ n or $\frac{2}{3}$ of an inch, d will equal $\frac{1}{3}$ n or $\frac{1}{3}$ of an inch. Thus b will equal c.

In general, when m and n are divided so that m:n::a:b::c:d, b will equal (n/x)m units length (x) is again the length of the original line), m.n

while c will equal (m/x)n units. Since both these lengths equal $\frac{}{x}$

segment b will always equal segment c.

⁴ Republic 509D.7: "Ωσπερ τοίνυν γραμμήν δίχα τετμημένην λαβών ἄνισα τμήματα, πάλιν τέμνε έκάτερον τμήμα ἀνὰ τὸν αὐτὸν λόγον...

⁵ Ibid., 509D.9: καί σοι έσται σαφηνεία καὶ ἀσαφεία πρὸς ἄλληλα

⁶ Ibid.. 511D.7: καί μοι ἐπὶ τοῖς τέτταροι τμήμασι τέτταρα ταῦτα παθήματα ἐν τῷ ψυχῷ γιγνόμενα λαβέ, νόησιν μὲν ἐπὶ τῷ ἀνωτάτω, διάνοιαν δὲ ἐπὶ τῷ δευτέρω, τῷ τρίτω δὲ πίστιν ἀπόδος καὶ τῷ τελευταίω εἰκασίαν, καὶ τάξον αὐτὰ ἀνὰ λόγον... οὔτω ταῦτα σαφηνείας ἡγησάμενος μετέχειν.

⁷ Ibid., 511D.5-6: ώς μεταξύ τι δόξης τε καὶ νοῦ τὴν διάνοιαν οὖσαν.

⁸ This equality of two segments will first be shown to hold for a specific case, then proven to hold in general,

The reader who is following the argument closely may decide at this point to draw a figure with all segments unequal, which will illustrate the a:b :: b:c :: c:d proportion just cited, and defer reconciling it with the earlier direction for construction.10 If the reader here remembers that Aristotle quotes an epistemological passage from Plato, which could be represented by a line divided into segments of lengths 1, 2, 4, and 8, he may try this version of an "unequal segment" figure. 11 Surprisingly enough, as he reads on, the reader will find this diagram has all of the properties that are attributed to the figure in Plato's text. Thus, in Republic 511.D, where the segments of the diagram are said to illustrate the a:b :: b:c :: c:d ratio, substituting from Aristotle's citation gives the ratios of segment lengths as 1:2 :: 2:4 :: 4:8. When, later, at 534A Plato ascribes the proportion (a + b):(c + d)::a:c:: b:d to his figure, Aristotle's lengths give 3:12 :: 1:4 :: 2:8. exactly fitting the text.12 And the same line gives a geometrical representation of passages in the Laws and Epinomis, as though Plato used the same image a number of times. 13

But though Plato does not say they hold between the segments of his diagram, the ratios (a + b):(c + d)::a:b::c:d express crucial relations between the kinds of knowledge which

⁹ All standard English translations render the direction for the cutting of the segments as "in the same ratio," which is the obvious meaning of the stipulation.

Notes 6 and 7 above quote from a summary of the discussion, Republic 509D-511D, in which the differences of the four kinds of knowledge in respect to clarity are established sharply.

¹¹ De Anima 404b.22: ἔτι δὲ καὶ ἄλλως, νοῦν μὲν τὸ ἔν, ἐπιστήμην δὲ τὰ δύο· μοιαχῶς γὰρ ἐφ' ἔν· τὸν δὲ τοῦ ἐπιπέδου/ ἀριθμον δόξαν, αἴσθησιν δὲ τὸν τοῦ στερεοῦ· The reference to 'proceeding directly from one' is reminiscent of the description of mathematics as a direct progress from hypotheses to conclusions in Republic 510-11. Further, the names assigned the four levels of knowledge are Aristotle's counterparts of the terms Plato attached to the segments of his line in Republic 511D.7, quote in Note 6 above. That the progression intended is 1-2-4-8, not 1-2-3-4, seems clear from comparison of this passage with Epinomis 991A.

¹² Lettering from top to bottom, and using the lengths of segment suggested by Aristotle, Plato's proportion: knowledge: opinion :: understanding:conjecture :: reason:belief thus fits exactly.

¹³ Epinomis 991A, Laws 894A.

the figure is supposed to represent.¹⁴ And these relations are so important that no scholiast or scholar has accepted the diagram with all segments unequal.¹⁵ One may note that suggestions for emendation of the text have not centered on the phrase "in the same ratio," but on the earlier reference to "inequality." ¹⁶ Since later references to the diagram make it clear that this inequality must be observed ,whether or not the initial directions specify it, no emendation has helped evade the basic inconsistency.¹⁷

After a detailed study of Plato's "mathematical" passages, I have come to the conclusion that carelessness in treating detail cannot be admitted as an explanation of the present discrepancy. But if one is convinced of this point, and no proposed textual emendation helps, the only conclusion left is that this is a deliberate discrepancy. Such discrepancies are not characteristic of other passages in which Plato refers to mathematical illustrations, but they do appear several times when a humorous aside warns the reader against taking mathe-

¹⁴ That is, knowledge:opinion:: reason:understanding:: belief: conjecture is the key analogy developed in Republic 534A 1.-10; it is this relation which most readers remember as the key to the entire epistemology of this section of the dialogue, and which they have preserved in their diagrams of the passage.

¹⁵ See the scholia on Republic 510 and 534 in W. C. Greene, Scholia Platonica.

¹⁶ The Budé Republic notes at 509D.7: ἀνισα A Plut.: ἀν, ἴσα F: ἴσα Ast: ἀν' ἴσα Stallbaum.

¹⁷ The figure still must illustrate the ratios quoted in n. 6, above.

¹⁸ I think that the notion once held that Plato was "not serious" in constructing mathematical images must be rejected in the light of demonstration that in several cases, the most minute details are interpretable, and show evidence of careful planning. My note on the "Colors of the Hemispheres in Plato's Myth of Er (Republic 616E)," Classical Philology XLVI (1951), 173-6, illustrates this point. In addition, further evidence is given in my "Note on the Numbers in Plato's Critias," Class. Philol. XLIII (1948), 40-42; "Note on Plato, Republic ix. 587D," Ibid., XLIV (1949), 197-9; and notes on teaching Plato's Republic VIII and IX, Classical Journal 46 (1951), 343-8. In the light of this and further material, it seems necessary to reject carelessness as the explanation of the difficulties in the divided line passage, even though a strange result follows from that rejection.

matical images too literally.¹⁹ Several times in the Republic itself this admonitory effect is achieved by puns on logos in its technical mathematical or epistemological and its non-technical sense.

In the divided line passage, no single figure can be iconic of all the key relations of the four levels of knowledge. Nor can any geometrical set of external relations among line segments be identified with the relations of the referents of those segments. If too much trust in the figure leads to such an identification, the Platonic theory of forms leads at once into the paradoxes with which Zeno and Parmenides confront young Socrates in the Parmenides.²⁰ Two figures come nearer to representing the argument accurately; one of them, a line with all segments unequal, underscores the differences between levels of, knowledge which Socrates has insisted earlier will make a philosophic ruler totally different from an empirical politician.²¹

¹⁹ Plato several times uses "mathematical jokes" (technical mathematical phrases where they do not belong) to quard against literal identification: of "logic" and "logistic" (Republic 580D.2, 525B, 602E); of the "rationality" of a line, externally imposed on it, and that of a ruler (Republic 534D.5); of a mathematical with the appropriate biological differentia (Statesman 257A). These "pleasantries" become puzzles if the reader forgets that some of Plato's contemporaries would probably make these identifications literally, if the "joke" did not preclude this. The divided line passage has this internal indication of limitations in common with the admonitory misuses of mathematical terms in the passages cited. If we take "the same logos" as a non-technical phrase, the meaning of which is "meeting the stated condition" (of inequality), we can perhaps salvage the passage from inconsistency at the price of accepting a diagram with four unequal segments as the only one intended. But with the suggestion of a diagram "in the same ratio" now in mind, the price is too high, and the careful reader is puzzled by thinking of two figures which seem alternately to illustrate the basic points of the context.

²⁰ Parmenides 132A-136A. See N. P. Stallknecht and R. S. Brumbaugh, The Spirit of Western Philosophy, 92-101, for the basic interpretation here intended. See also the discussion of Whitehead's concepts of space and location, Ibid., 425-30, where some of the consequences of thinking in terms of the sort of "simple location" that parts have in abstract diagrams are indicated.

²¹ Republic 472A ff. This "greatest and most difficult" wave of the three objections Socrates must answer is not completely met until 541B. But the first half of the answer, developed from 472 to 509, stresses the invalidity of identifying the "philosophic ruler" with the ordinary practicing politician.

The other, a line re-cut in the same ratio, underscores the similarities in method and the connection of these levels of knowledge, in virtue of which Socrates can set up a program of education that makes smooth transitions in the following Book of the *Republic*.²² As was said, neither does justice to the network of internal relations which spatialization projects badly.

In short, to schematize the passage adequately, the reader should have two distinct diagrams, and be mistrustful of both. Apparently the danger seemed greatest to Plato that we would overlook the differences between the levels of knowledge, 23 for there is careful limitation of statements about the figure to properties which a figure with four unequal segments will represent. But the initial suggestion having been made, the inadequacies of this figure are by 534A quite clear, and we think once more of the line cut in the same ratio.

The result has not been what Plato anticipated if he expected this: later readers have tended to lose sight completely of the importance of the figure iconic of difference, and to identify the relations of kinds of knowledge too literally with the relations of segments which they construct in their versions of the figure.

ROBERT S. BRUMBAUGH

Yale University.

²² Republic 515A-541B. The brevity of the description of "harmonics" in 530C-D suggests that the "synoptic" study of relations in mathematics is so close to the method of "dialectic" that little needs to be said about it, since 531C-541B will explain the latter.

²³ Examination of later illustrations will show that the first result (that of suggesting a diagram with proportionate division and subdivisions) has followed uniformly from the passage. But we have tended to miss the electric effect of finding this diagram inapplicable to the text, because we trust it too far, and assume too readily that its inapplicability is accidental.

²⁴ See notes 6, 14, above for the two sets of ratios of which an adequate diagram should be iconic.

INTERNAL RELATEDNESS AND PLURALISM IN WHITEHEAD

It will be our contention that there is a fundamental inconsistency in Whitehead's Philosophy of Organism, and hence that, whatever be its other merits, the system cannot be considered satisfactory until this defect is somehow removed. We call this inconsistency fundamental because the principles between which it holds are two which Whitehead himself believed, and believed rightly, to be of basic importance in the structure of his philosophy; viz., the Principle of Internal Relatedness and the Principle of Pluralism. In exhibiting and commenting on the inevitable conflict between these principles, we shall proceed as follows: first, an exposition of each of the principles as it is found in the context of the philosophy of organism; second, a demonstration of their apparent incompatibility; and finally, an examination of certain features of Whitehead's philosophy which, if tenable, would enable him to avoid this difficulty.

I

We turn first to the Principle of Internal Relatedness. The particular aspect of Whitehead's doctrine of relations to which we give this title is that which concerns the relations of actual occasions, the particular concrete momentary events of which the world consists.¹ Put precisely, Whitehead holds that all the relations in which a given actual occasion, A, stands to other entities are internal to it in the sense that they form part of its essential nature; they are essential to its self-identity; without standing in just those relations it could

¹ In what follows we shall for the most part refer to the basic particulars of Whitehead's metaphysics as "actual occasions" or "actual entities," rather than "events"; for the former two are the terms he used for this purpose in the most systematic presentation of his philosophy, Process and Reality. The quotations given below are easily converted to the language of Process and Reality by just substituting "actual occasion" or "actual entity" for "event."

not be just the particular individual which it is. Or, if it is considered undesirable to speak of an entity not being itself, we can put the point by saying that where A is internally related to B, no individual, x, could conceivably be identical with A unless it had that relation to B. Whitehead's most decisive statements of this position are to be found in Science and the Modern World:

The theory of the relationship between events at which we have now arrived is based first upon the doctrine that the relatednesses of an event are all internal relations 2... This internal relatedness is the reason why an event can be found only just where it is and how it is, that is to say, in just one definite set of relationships. For each relationship enters into the essence of the event; so that, apart from that relationship, the event would not be itself. This is what is meant by the very notion of internal relations.³

The position here maintained is that the relationships of an event are internal, so far as concerns the event itself; that is to say, that they are constitutive of what the event is in itself.⁴

This fundamental thesis of the essential interconnectedness of particular occasions is reiterated by Whitehead in a variety of formulations throughout his later works, all expressing the same basic conviction. To say that all the relations which an event has are internal to it is also to say that it is essential to it that the other entities which form the opposite termini of these relations be just as they are; for unless the other relata were just as they are, the event could not have just the relationships it has. Thus Whitehead can express the doctrine of internal relations (or rather an implication of it) by saying that every actual entity requires all other actualities in order to be what it is. "Every actual occasion exhibits itself as a process, it is a becomingness. In so disclosing itself, it places itself as one among a multiplicity of other occasions, without which it could not be itself." 5 The same truth can be stated in another way by the concept of relevance. "It will be presupposed that all entities or factors in the universe are essen-

² Alf-ed North Whitehead, Science and the Modern World (New York: Macmillan, 1925), p. 179.

³ Ibid., p. 180.

⁴ Ibid., p. 152.

⁸ Ibid., p. 253. Cf. also ibid., p. 278 and Process and Reality, p. 38.

tially relevant to each other's existence." ⁶ In other words, if we take any given actuality, all other entities in the universe are essentially relevant to it in the sense that since it essentially involves its relations to them, it could not be, nor be fully understood, without them. Finally, "an event has to do with all that there is, and in particular with all other events"; ⁷ "has to do" in the sense that its transactions or dealings with other things are constitutive of its own nature.

The Principle of Internal Relatedness has another form, the understanding of which is of importance in uncovering the contradiction in which we are interested; we may, following Whitehead, call this form the Principle of Mutual Immanence. It consists in asserting that actual occasions are present in, or parts of, each other. Particular events are not, as is supposed by mechanistic philosophers, each isolated in its spatiotemporal region, doomed forever to remain within its inexorably fixed limits; but instead each, in some sense, has its being inextricably intertwined with all other actualities. To adapt Shelley a bit:

Nothing in the world is single: All things by a law divine In another's being mingle.

More precisely, any actual occasion contains as ingredients, or components, all entities to which it is (internally) related, and conversely it enters as an ingredient into all the actual occasions which are (internally) related to it. Some of the chief passages in which this contention is set forth are the following:

For an actual entity cannot be a member of a "common world," except in the sense that the "common world" is a constituent of its own constitution. It follows that every item of the universe, including all the other actual entities, are constituents in the constitution of any one actual entity.8

All entities, including even other actual entities, enter into the self-realization of an actuality in the capacity of determinants of the definiteness of that actuality.⁹

⁶ Alfred North Whitehead, "Immortality," in Essays in Science and Philosophy (New York: Philosophical Library, 1947), p. 77.

⁷ Science and the Modern World, p. 151.

⁸ Process and Reality, p. 224.

⁹ Ibid., p. 340.

In fact if we allow for degrees of relevance, and for negligible relevance, we must say that every actual entity is present in every other actual entity. 10

We have spoken of this theory as another form of the Principle of Internal Relatedness, because Whitehead himself commonly treats them as logically equivalent, and often uses them interchangeably. Although he is not very explicit as to his grounds for doing so, we can, I think, take the following passage as indicative of the considerations which weighed with him in asserting this equivalence.

According to the doctrine of relativity which is the basis of the metaphysical system of the present lectures, both of these notions involve a misconception. An actual entity cannot be described, even inadequately, by universals; because other actual entities do enter into the description of any one actual entity... Every so called "particular" is universal in the sense of entering into the constitution of other actual entities.¹²

If we were to expand the argument which seems to be implied in this passage, it would run somewhat as follows: To hold a theory of internal relations with regard to actual entities (here described as a "doctrine of relativity") is to hold that we can only say what any given actual entity, A, is (i.e., can only say what constitutes it as the particular actuality which it is) in terms of the relations it has to other entities. But this, in turn, implies that other actual entities "must enter into the description of any one actual entity." For we cannot describe A, i.e., tell what A essentially consists of, without rendering account of A's relations to other actual entities, and thereby including in the account the other terms to which A has the relations. But any entity which is involved in the account of the nature of a thing must be involved in some sense in that thing's nature. If we can't completely describe the essential nature of A except in terms of B, then B is involved as a factor in A's essence. If we can only disclose A's nature in terms of all other actual entities (or any selection thereof), then those other actual entities are components of A. Whatever be the merit of this argument, it seems to have been

¹⁰ Ibid., p. 79.

¹¹ See, e.g., ibid., p. 79; Adventures of Ideas (New York: The Macmillan Co., 1933), pp. 231, 356; Science and the Modern World, p. 137.
¹² Process and Reality, p. 76; italics ours.

the ground for Whitehead's assertion of the equivalence of the two principles in question.

Thus to say that A is internally related to all the entities to which it is related, is to say that it contains all these entities as ingredients within its nature.¹³ We shall follow this asserted equivalence of the two theses by henceforth using the phrase "Principle of Internal Relatedness" to refer to both.

But in what sense are the terms "present in," "part of," etc., used when we speak of one actual occasion being present in or part of another? Surely one atomic event, A, cannot be present in another atomic event occupying a different spatiotemporal region, in the sense in which a drawer is present in a desk or a fish in a fish-bowl. Whitehead recognizes this as a major problem for his philosophy. "The philosophy of organism is mainly devoted to the task of making clear the notion of 'being present in another entity'." 14 The solution he gives is based on the conception of an actual occasion as an act of experience. Each of the momentary events which constitute process is to be conceived, according to Whitehead, as an act of feeling (in most cases unconscious, to be sure), a process of fusing together partial feelings, or "prehensions." into one determinate integrated experiential unity. But an experience, according to Whitehead, always involves the presence within it of the objects experienced.15 We can have no awareness of "any remote occasion which enters into no relationship with the immediate occasion so as to form a constitutive element of the essence of that immediate occasion." 16 We can only concern ourselves experientially with that which is in experience, which is present to us so as to be capable of evoking concern. To be experienced in any way is to be an

¹³ Of course for the two to be logically equivalent there must be an implication from mutual immanence to internal relatedness as well as vice versa. But this is obviously the case. Any whole, e.g., a brick pile, is internally related to each of its parts, e.g., a single brick; for if it didn't have this whole-part relation to just that brick, it could not possibly be just the brick pile which it is, although it might be a pile very similar to the original one.

¹⁴ Ibid., pp. 79-80.

¹⁵ Adventures of Ideas, p. 287.

¹⁸ Science and the Modern World, p. 38.

ingredient in that act of experience. Granted this view of the relation of a sentient act to its objects, and granted a panpsychist theory of events, we are supplied with a way of conceiving the mutual immanence of events. Since a given actual occasion, A, is an act of experience, any relations in which it stands to any other entity, x, will be interpreted as a feeling or prehension of that entity on the part of A; 17 and, by the principle just expounded, this will necessitate the inclusion of x within A as an immediate datum, i.e., as an ingredient in the experiential unity which constitutes A. Thus "the way in which one actual entity is qualified by other actual entities is the 'experience' of the actual world enjoyed by that actual entity, as subject." 18 In this way Whitehead's view of the world as consisting of internally related momentary events, receives a concrete interpretation as a world of acts of experience, each containing others through its appropriation of them as immediate data in its own felt unity.

We now turn to the second of the principles with which we are here concerned, the Principle of Pluralism. According to the philosophy of organism the world is made up of many acts of experience, each of them finite in spatio-temporal extent, each of them limited in the selection of possible patterns of feeling which it realizes, each of them exclusive of much that it might be and is not, each of them placing itself as one among the many as well as fusing the many into the one. Whitehead can thus describe his philosophy as a cell theory of actuality,19 or as an "atomism" of experiential events.20 But the pluralism which we maintain to be incompatible with internal relatedness involves more than the mere assertion that there is in some sense a plurality of entities in the world, a statement which would be denied by no one.21 In order to convey precisely the stronger sense of pluralism which we have in mind, we shall introduce a few technical terms.

¹⁷ Process and Reality, p. ix; Adventures of Ideas, pp. 299-300.

¹⁸ Process and Reality, p. 252. Cf. ibid., pp. 81, 249, 327; Adventures of Ideas, pp. 300, 305.

¹⁹ Process and Reality, p. 334.

²⁰ Ibid., pp. 40, 53.

²¹ Except perhaps by Parmenides, and his disciples through the centuries: e.g., the Schelling (whether real or fictional we shall not attempt to decide) who plays the part of whipping boy in Hegel's *Phenomenology*. But of course even Parmenides has his "Way of Belief."

An entity, A, will be said to have a higher degree of unity (or be more unified or more integrated) than another, B, if the constituent parts of A depend more closely on each other than do those of B, if the removal of one part of A will affect both it as a whole and the other parts more than a similar transaction would affect B and its parts, if a part of B can be described in abstraction from the other parts less inadequately than would be possible for a part of A. For example, a tree has a higher degree of unity than a pile of sand. Take away a few grains of sand from the latter, and the remaining heap is almost indistinguishable from its predecessor. But remove a few cells from the former, especially if in a vital spot, and the remaining organism and its parts undergo a marked transformation as a result of that removal.

In terms of this notion we can distinguish between "pluralistic" and "monistic" sets. A given set of entities will be said to be a pluralistic set if and only if there is no entity which (1) includes all the members of the set as parts, and (2) has a degree of unity at least as strong as that enjoyed by each member of the set.²² Such a set will also be said to constitute an ultimate plurality. Per contra, a set with respect to which such an entity does exist can be termed a monistic set. For example a legislative body, at least as commonly conceived, would constitute a pluralistic set. On the other hand, the organs, muscles, bones, nerves, etc., of a man would be commonly conceived as forming a monistic set.

In these terms a philosopher is a metaphysical pluralist if he holds that the ultimate constituents of the world form a pluralistic set; or, in other terms, if he holds that there is a plurality of exemplifications of the basic metaphysical categories and that there is no exemplification which contains all others as parts.

Now it is evident that Whitehead holds to pluralism in this sense. He is emphatic in denying that there is any allinclusive act of experience, or any other all-inclusive actuality of a comparable grade of unity, which embraces all finite

²² If the members of the set exhibit various degrees of unity, then the definition would have to be amended to read: "at least as strong as that enjoyed by the most unified member of the set."

experiences as component parts.²³ It is not the case that there is any one cosmic actual occasion which fuses all finite experiences into an immediate unity of feeling. In fact, Whitehead considers that the conditions of aesthetic experience make it impossible that there should be an all-inclusive experience. There are mutually incompatible aesthetic possibilities which can, and do, receive felt realizations separately, but cannot be experienced jointly.

Every occasion of actuality is in its own nature finite... Whatever is realized in any one occasion of experience necessarily excludes the unbounded welter of contrary possibilities. There are always "others," which might have been and are not. This finiteness is not the result of evil, or of imperfection. It results from the fact that there are possibilities of harmony which either produce evil in joint realization, or are incapable of such conjunction. This doctrine is a commonplace in the fine arts.²⁴

Hence "all realization is finite, and there is no perfection which is the infinitude of all perfections." ²⁵ "The mere fusion of all that there is would be the nonentity of indefiniteness." ²⁶ It should be abundantly clear from these quotations that Whitehead holds that the actual entities of which the world consists form an ultimate plurality, not reducible to any encompassing unity, *i.e.*, that he maintains the Principle of Pluralism as herein defined.

II

We have seen that Whitehead holds to both internal relatedness and pluralism with respect to the actual occasions which form the ultimate constituents of the world. But it seems that the former of these principles implies the negation of the latter. For, according to the former, all of the relations in which any actual entity stands are internal to it, and this in turn implies that it contains within its experience all the other termini of these relations. In other words, the Principle of Internal Relatedness says that an actual entity contains all

²³ Alfred North Whitehead, Religion in the Making (New York: The Macmillan Co., 1926), p. 92.

²⁴ Adventures of Ideas, p. 356. Cf. also ibid., p. 333.

²⁸ Ibid., p. 330. Cf. also ibid., p. 356.

²⁶ Science and the Modern World, p. 137.

the entities to which it is related. But it seems that any actual entity must be related to every other actual entity by some link or other; for with regard to any two actualities we can form some true proposition asserting some relation between them, even if it is only one of similarity or difference. Therefore any actual entity you take, as related to every actuality, will be revealed on examination to contain all these actualities within it as ingredients in its nature; any actual entity, when viewed in the full concreteness of its interrelations, will be found to be the all-embracing totality of process. Thus the theory of internal relatedness, as held by Whitehead, seems to have as its consequence the existence of at least one actuality which is all-inclusive — this characteristic holding, in fact, of any actual entity we can specify. And this is the denial of the Principle of Pluralism.

Indeed, the proper conclusion seems to be still stronger; viz., that there is and can be only one actual entity: for if we were to suppose a plurality of different actual entities, A. B. and C, each of them, as internally related to all the rest, would have to include the rest, so that what we called A is really A + B + C; likewise what we called B, and what we called C, is each A + B + C; so that each member of the supposed plurality turns out on examination to be the whole set. The apparent result then is that we can really make no distinction at all between the three supposedly different actual entities: each of them is A + B + C, and as such they are identical. Hence the proper conclusion would seem to be that there can be only one actual entity, and that the various partial components of this inclusive actuality, i.e., the finite experiences of the world, are not themselves actual entities, but rather prehensions which go together to form the one actual entity. But whether or not we are justified in drawing this further inference, it seems that the theory of internal relations does imply that there is at least one such actual entity; and this would be enough to contradict Whitehead's thesis that the set of actual entities forms an ultimate plurality.

We should not, however, suppose that the matter is quite so simple. Whitehead is by no means unaware of the way in which a theory of internal relations is apt to lead the unsuspecting metaphysician into the morass of monism; and as a precaution against falling victim to such a fate, he tries to introduce certain qualifications and limitations into his theory of internal relatedness which will have as their effect the avoidance of any monistic conclusion, while still preserving the spirit and letter of the doctrine as expounded above. In fact there are two such limitations, or further specifications, which, if tenable, would somewhat alter the picture. Therefore, before we can repose any confidence in our conclusion, we must examine each of these qualifications and determine whether it accomplishes the purpose for which it is intended.

The first of these qualifications has to do with the relevance of temporal position for the question. Our argument for the incompatibility of the two principles was based on the premise that any actual occasion is related in some way to every actual occasion. But Whitehead would not accept this premise in the unqualified form that is given here; he would insist that we qualify it to read every actual occasion is related to every actual occasion in its past, or more precisely, related to every actual occasion which has completed its becoming prior to the beginning of the becoming of the actual occasion in question. With this limitation the principle of internal relatedness would require any given actual occasion to include all its predecessors, but not its successors and contemporaries. Whitehead thinks that this limitation is necessary because he holds that at the time at which an occasion happens its predecessors are the only actualities which there are to be included or to be related to: they are the only actualities which, at that time, are "there" so as to be available for inclusion as data within the concrescent occasion.

Any actual occasion, A, as a finite act of becoming, requires a certain finite duration, d, for this activity. With respect to this duration, we can distinguish three groups of occasions: ²⁷

- Those which have completed their concrescence prior to or at the beginning of d.
- Those which will begin their concrescence at or after the end of d.

²⁷ See ibid., pp. 106-107, 253: Whitehead, Process and Reality, pp. 188-192.

Those whose process of concrescence falls wholly or partially within d.

These groups will hereinafter be referred to as the past, future, and present, respectively, of d; or alternatively, as the predecessors, successors, and contemporaries, respectively, of A^{28}

In order to discuss profitably the question as to whether the members of each of these groups are available for inclusion as data in the experience of A, we must, following Whitehead, distinguish two modes of being proper to an actual entity - viz., subjective immediacy and objective immortality.29 An actual entity exhibits subjective immediacy insofar as it is itself engaged in a process of fusing given data into one complex experiential whole. At the time during which it is so engaged the actual entity is said to have 'formal reality,' the reality appropriate to a subject of experience. On the other hand, an actual entity exhibits objective immortality insofar as it is functioning as a datum or component in another such process of feeling; and at any time at which it plays, or could play, such a role, it is said to have 'objective reality', the reality appropriate to an object of experience. For convenience of exposition, we shall use the term 'existence' as equivalent to 'subjective immediacy', and the term 'actuality' as equivalent to 'objective immortality'.

It is Whitehead's contention that at a certain duration. d, only the present exists, and only the past is actual. Taking these assertions in order, during d it is only those occasions which are, at that time, in the process of attaining a unity of experience which exist, or have subjective immediacy. This is really true by definition; for the duration we are calling d is distinguished from all others by its being the locus of a certain slice of the world process, and not of any other slice; and so the events which constitute this slice of process are, of course, the only ones which are in process, or exist as active subjects, in this duration. With respect to actuality the situation is quite different. Here Whitehead holds that only the past is actual. Almost all philosophers would agree that, as we defined

²⁸ When such qualifying phrases as 'with respect to d' and 'with respect to A' are not explicitly expressed, they are to be understood.

²⁹ See ibid., pp. 34, 335-336; Whitehead, Science and the Modern World, pp. 151, 152-154.

the terms, at least the past is actual. For a past event is one which, having already completed its process of becoming, now has a fixed determinate constitution, and so can function as a perfectly definite terminus for inquiry. Any statement which we make about it is now determinately true or false, in that it now conforms or fails to conform to a definite objective fact, even though we may not now know which is the case. White-head would, however, command less widespread assent on the proposition that only the past is actual, the present and future being unactual. Let us see his reasons for this position.

I think that the root of this view is to be found in his ninth categoreal obligation: "The concrescence of each individual actual entity is internally determined and is externally free." 30 On this indeterministic principle, each actual entity is an act of spontaneous self-creation of a unity of feeling out of given data: although certain limitations are laid upon it by the past (as exemplified in those data), its exact nature is only decided in its act of becoming and before that act it has no sort of being. Its constitution is to a certain extent shaped for it by its predecessors, for it must be an experience with just these data as components; but the exact way in which it reacts to these data, meets them with a flood of subjective feeling, and weaves them into one coherent whole, is due, in the last analysis, to its own free spontaneity. Hence actual entities future to d, having not yet undergone their process of self-creation, have, as of d, no status as determinate individuals.31 Having not yet performed the decision which will resolve the indeterminations concerning the details of their nature, they cannot now function as fully determinate data of experience. There is now no realm of future individuals, even in the ideal sense of a realm of possible objects for thought or experience; and there will not be until such time at which these individuals undergo the process which constitutes their existence.32 Hence there are questions concerning them which now have, not just for our limited knowledge but absolutely, no determinate answers; they cannot function as ideal limits for inquiry; they are, in the sense given above to that term, not actual at d.

³⁰ Whitehead, Process and Reality, p. 41.

³¹ Ibid., p. 328.

³² Whitehead, Adventures of Ideas, pp. 247, 248, 249, 251.

And the same conclusion follows, for the same reasons, with regard to the present.33 Occasions present with respect to d (A and its contemporaries) have not completed their concrescence by the beginning of d. Some complete it during d: others complete it at the end of d; still others complete it after d. But in any of these cases, since each can have no status as a fully determinate individual until the completion of the selfdecision which constitutes its definiteness, none of them are actual at the beginning of d. But to be actual at (or in) d. i.e., to be able to function as a datum for A, or for any other occasion whose period of concrescence defines d, an actual entity must be available as a definitely constituted object at the beginning of A's concrescence; for it is at the beginning that A appropriates its initial actual data from outside itself; the remaining stages of the concrescence being occupied with rearranging and unifying them, and adding conceptual data. And since none of the contemporaries of A meet this qualification, none of them are actual at d. It follows then from Whitehead's special brand of indeterminism that only those occasions which have been actualized by the beginning of d could be said to be actual in d.

Granted this theory of the ultimacy of temporal stand-point, the required limitation of the Principle of Internal Relatedness follows. For at the time at which A happens, its predecessors are the only occasions which have a determinate objective status; they are the only available relata, the only occasions which are "there" so as to be available for inclusion as components in A's constitution. Thus if we "take time seriously," we must restrict the Principle of Internal Relatedness (as far as actualities are concerned) to the predecessors of the occasion in question. Whitehead can still, in a sense, call his theory an unqualified theory of internal relations, for on his view it is true to say that an actual entity is internally related to all other actual entities — meaning all that there are at the time of its concrescence. But we must be careful to understand the principle, when stated unrestrictedly, in this sense.³⁴

³³ Ibid., pp. 252, 280.

³⁴ This doctrine will, if stated fully, involve something like the medieval distinction between real and nominal relations. For in speaking at a certain duration, e, about A (which occurred at an earlier duration, d), we speak of the way in which B, which occurs at e, includes A as a

It can easily be seen that this temporal qualification on the Principle of Internal Relatedness enables, nay requires, Whitehead to hold that actual occasions form an ultimate plurality. There are, in fact, two sorts of pluralism which it entails corresponding to the two groups which are excluded from the field of relata for any actual occasion.

In the first place, the fact that no actual entity can include its contemporaries within its nature insures that, if we restrict our consideration to any one duration, within that duration there is an irreducible plurality; i.e., there is no occasion within that duration which contains all the other occasions within it

as parts.

It might seem that this is but a 'temporary' pluralism, because after all the constituents of d have completed their concrescence any subsequent occasion will contain them all within its unity. But the point is that at that later duration there is a similar situation; the occasions which are then in process of concrescence form an ultimate plurality too, as of that duration. At any time there will be actualities, all existing at that time, which are not as of that time all components of any one unity. If this is a 'temporary' pluralism, it is a permanently recurring one.

In addition to this "spatial" pluralism, which has to do with the actual entities existing at the same time, Whitehead's

component; and hence we have to speak of A being in some sense reciprocally related to B; e.g., if B includes A, then A is included by B; if B feels A, then A is felt by B, etc. What we have to say, on Whitehead's theory, is that while the relations of B to A are real relations, the relations of A to B are only nominal ones. When we say that B includes A, we are saying something about the intrinsic nature of B, for it is part of the process which constitutes the very being of B that it has A as a datum for feeling: but it is nothing to the intrinsic nature of A that it is felt by B, for this feeling takes place after the process formative of A had reached its conclusion; at the time of A's process it had no determinate being and so could play no part in A's concrescence. Thus we would have to distinguish, among statements in relational form, between those which state a relation which is real in the nature of things, and those which are merely circuitous ways of speaking. To say that A is felt by B is not to say anything about A, but just a cumbersome way of saying something about B: viz., that it feels A. In this manner we might maintain the position that A is really only related to its predecessors, while still allowing, as a manner of speaking, statements about the relations of A to its successors and contemporaries.

world also exhibits what we might call a temporal or a linear pluralism, this being due to the second restriction made on the Principle of Internal Relatedness; viz., the impossibility of an actual occasion's containing its successors. An actual occasion, A, occurring at d, will contain every actual occasion which forms a possible datum for it, i.e., all which have been actualized in its past. But it will not thereby be all-inclusive in any absolute sense, for at each succeeding stage of process new occasions are being actualized which were not actual at d, and so could not have been included by A. And since this account applies to every actual occasion, there can be no all-inclusive actuality. At any next moment, then, there will ensue a more inclusive synthesis, and this new one will in turn suffer the same fate of being superseded, and so on ad infinitum.

If, then, Whitehead can maintain his theory of the ultimate reality of time, with its implication of the non-actuality of the present and future, he can maintain both of the principles we are considering. But can he do so consistently with his own principles and with the facts he is bound to admit, if he is to keep his system adequate to experience?

Ш

Let us first consider the future. It should not be supposed that Whitehead denies that an event is, in any way whatsoever, related to subsequent process. On the contrary he not only admits, but insists, that, in some sense or other, every actuality contains an essential reference to the future. The possibility of such a reference is presupposed in every aspect of our daily life.

It is evident that the future certainly is something for the present. The most familiar habits of mankind witness to this fact. Legal contracts, social understandings of every type, ambitions, anxieties, railway time-tables, are futile gestures of consciousness apart from the fact that the present bears in its own realized constitution relationships to a future beyond itself. Cut away the future, and the present collapses, emptied of its proper content. Immediate existence requires the insertion of the future in the crannies of the present. 35

And if, as Whitehead claims, what is always immediately experienced is a duration of finite extent containing a process, a passage, a "something going on," then any datum of imme-

³⁵ Whitehead, Adventures of Ideas, p. 246. Cf. also ibid., pp. 247, 342.

diate experience will necessarily reveal itself as derived from the past and passing into the future; it will exhibit an intrinsic relatedness to the future. This inescapable reference to the future is especially prominent if we restrict our attention to the immediate future, separated from the present by the span of a second or less, rather than to the more remote future of a day, a month, a year, or a century hence.

If we keep ourselves to this short-range intuition, assuredly the future is not nothing. It lives actively in its antecedent world. Each moment of experience confesses itself to be a transition between two worlds, the immediate past and the immediate future. This is the persistent delivery of common sense.³⁶

Whitehead's recognition of the reference the present makes to the future is reflected in his account of the metaphysical structure of an actual occasion. Each occasion performs its activity of self-creation in view of the fact that it itself will be succeeded by future occasions in which it will play an important formative role; and to a certain extent it performs this activity for the sake of making a valuable contribution to the experiences of those successors.³⁷

Thus any actual occasion must contain in its immediate constitution a reference to its future; and more specifically must, in some sense, prehend the future, must somehow include the future within itself as a datum of its experience.³⁸ But there are, at the time of an occasion's concrescence, no actual entities which are future relative to it.³⁹ "In the present, the future occasions, as individual realities with their measure of absolute completeness, are non-existent." ⁴⁰ How, then, can he maintain that the present occasion includes the future as an immediate datum when he denies that, in the present, there are any future occasions to be included? In what sense can the present occasion prehend the future, if there are no future actualities to be prehended?

Whitehead's answer to this question deserves to be quoted at length:

³⁶ Ibid., p. 247.

³⁷ See, e.g., ibid., p. 249; Whitehead, Process and Reality, pp. 41, 328, 424, 425.

³⁸ Whitehead, Process and Reality, p. 328.

³⁹ Ibid., p. 328: Whitehead, Adventures of Ideas, pp. 249-251.

⁴⁰ Ibid., p. 247. (To convert to our terminology, change "non-existent" to "non-actual.")

It is now possible to determine the sense in which the future is immanent in the present. The future is immanent in the present by reason of the fact that the present bears in its own essence the relationships which it will have to the future. It thereby includes in its essence the necessities to which the future must conform. The future is there in the present, as a general fact belonging to the nature of things. It is also there with such general determinations as it lies in the nature of the particular present to impose on the particular future which must succeed it. All this belongs to the essence of the present, and constitutes the future, as thus determined, an object for prehension in the subjective immediacy of the present . . . Thus the future is to the present as an object for a subject. It has an objective existence in the present. But the objective existence of the future in the present differs from the objective existence of the past in the present ... there are no actual occasions in the future, already constituted. Thus there are no actual occasions in the future to exercise efficient causation in the present. What is objective in the present is the necessity of a future of actual occasions, and the necessity that these future actual occasions conform to the conditions inherent in the essence of the present occasion. The future belongs to the essence of present fact, and has no actuality other than the actuality of present fact. But its particular relationships to present fact are already realized in the nature of present fact.41

In other words, there are, at a given duration, d, no individual actual occasions which are future with respect to d. But there are in the constitution of the present occasion, A, and in the constitutions of past occasions prehended by A, real potentialities for the future; this means that the constitution of any future occasion, C, when it does become actual, will be partially determined by the nature of the occasions actual now, for C can only perform its own act of concrescence on the basis of the data given it from its past, and so will be what it is partly because of its inclusion of A and A's predecessors as objective data within its own unity of experience. The constitutions of A and its predecessors, while not themselves future occasions, can nevertheless be considered as aspects of future occasions. since any future occasion must, to some degree, contain them as objects. Hence in prehending its own nature and the nature of its predecessors, A is prehending aspects of future occasions, and in so doing is related to, and inclusive of, the future to some extent; it includes some of the objects of future occasions,

⁴¹ Ibid., pp. 250-251. Cf. also Whitehead, Science and the Modern World pp. 107, 253.

though it includes none of their 'subjective forms', none of the concrete modes of feeling with which they will receive these objects into their experience. In this way Whitehead considers himself to be able to hold both that we really, in the present, prehend the future, and that there are, as of the present duration, no determinate future actualities.

But if prehensions of the future are to take place in the manner just described, it is not enough that a present occasion, A, should simply prehend aspects of itself and its predecessors; in addition, it should prehend them as potentialities for the future, as features which will be contained in future occasions. This is what must be added to constitute them prehensions of the future. Simply to feel aspects of present and past actualities as aspects of present and past actualities, is not to prehend the future; it is to prehend the present and the past. To accomplish a prehension of the future, we have to prehend these same features as determining partially the constitution of future actual occasions: we have to prehend them as forming, or as destined to form, objects of future individual occasions. Otherwise why say we are prehending the future, instead of just the past or present?

Now in Whiteheadian terms, if an actual occasion is to prehend certain aspects, m, n, ..., of its predecessors as destined to form objects of future occasions, it must, in so doing, prehend a complex datum which contains in addition to m, n, ..., some extra element, x, which is to provide the reference to the future. The question then is: what can this extra element be? It is our contention that it can only consist of relations (part-whole or subject-object) of m, n, ..., to determinate individual future actual occasions. But before embracing this conclusion let us make sure there are no possible alternatives.

There are in Whitehead's world only two basic sorts of entities, actual occasions and eternal objects. ⁴² The x in question must, then, be one or more actual occasions, or one or more eternal objects, or some complex containing both types. It might seem that it could be the eternal object, futurity, *i.e.*,

⁴² This classification corresponds roughly to the usual particularuniversal dichotomy, with the major exception that, as pointed out above, an actual occasion can, like a universal, be present in many actual occasions.

the property of being in the future. On this supposition, m, n, ..., would be prehended as aspects of future actuality because they were conjoined in experience with the concept of futurity. But this would fail to account for the direct presence of the future within present experience, on the reality of which Whitehead is so insistent. It would mean that our cognition of the future is an imaginative construction out of elements from the past - not the immanence within the present of the future actuality itself. This would leave it possible, contrary to Whitehead's explicit doctrine, that the future relative to this moment would never occur; this experience would carry in its constitution no necessity for forming the immediate datum for a successor, and so it itself might be the last gasp of process. If "we conceive ourselves as related to... future by a mere effort of purely abstract imagination, devoid of direct observation of particular fact... there is no real evidence that... there will be a future. Our ignorance on this point is complete." 43 And this objection would hold equally against any other eternal object.

There are, of course, complexes of actual occasions and eternal objects, such as the entities which Whitehead terms "propositions." But it seems that no proposition, or any other such complex datum, could involve a reference to the future except by virtue of containing among its constituents either some such eternal object as futurity, or future actual occasions; and we have already ruled out the suitability of eternal objects for such a role. It appears, then, that the only alternative open to Whitehead is to say that A prehends m, n, ..., as potentialities for the future by prehending them in certain relations to future actual occasions.

And this in turn implies that A must prehend future actual occasions. For to prehend any term as in a certain relation to another term, is also to prehend the other term. I can only prehend San Francisco as north of Los Angeles, provided I also prehend, in some mode or other, Los Angeles.⁴⁴ I can only prehend black as darker than yellow provided yellow

⁴³ Whitehead, Adventures of Ideas, p. 247.

⁴⁴ This, of course, is not to say that I must be having sense perceptions of Los Angeles, or even vivid images of it, or be prehending it in any other special mode. It is only to say that I must be cognitively related to it in some fashion if I am to prehend something else as related to it.

enters in some way into my experience as a datum. Analogously A can only prehend m, n, ..., as related in certain ways to future actual occasions if it prehends the determinate future occasions to which they are related. Thus Whitehead's own account of prehensions of the future implies that any actual occasion, A, must prehend, and so include within its nature, future actual occasions. For according to that account A prehends the future by prehending aspects of its predecessors — as potentialities for the future. But for Whitehead this can only mean that A prehends those aspects as related to future actual occasions; and this in turn implies that A prehends those future occasions. Whitehead can, by the terms of his philosophy, admit any reference to the future only if he admits that every actual occasion includes the whole of future actuality, as well as the whole of past actuality, within its experience.⁴⁵

The same sort of considerations will show that Whitehead is unable, on his principles, to exclude the contemporaries of A from inclusion as data within its experiential unity. Again there are certain relations which we must, if our philosophy is to be adequate, admit to hold among contemporaries; e.g., spatial relations. If two actual occasions, A and D, both perform their concrescence in the same duration, they must occur in different spatial regions, and so stand in certain spatial relations to each other. And on Whiteheadian principles these relations must be prehensions of A by D, or of D by A, or both. Again Whitehead tries to give a Pickwickian interpretation of this fact by construing A's prehension of D as A's prehensions of certain aspects of its predecessors which must also be aspects

⁴⁵ Why the "whole of future actuality?" Doesn't Whitehead only insist that the *immediate* future is immanent in present experience? But any actual occasion, A, is related in some way (at least by similarity and difference) to every actuality in its future; and if we are going to admit that A directly prehends some determinate individual occasions in its future, there seems to be no reason for refusing to interpret all relations of A to future occasions as direct prehensions of those occasions. Moreover it can be easily shown that on Whiteheadian principles the presence in A of its immediate successors will involve the presence of the totality of future process. For these immediate successors likewise contain their immediate successors, and they in turn theirs, ad infinitum. The relation of containing being transitive, this means that A must contain all its successors without exception. This demonstration does presuppose, contrary to Whitehead, that if A prehends B, it prehends B in its complete nature; but it is shown below (pp. 556-557) that Whitehead must accept this principle.

of D, since these same predecessors are likewise prehended by D. But this attempt fails for a reason precisely analogous to that which we adduced in the case of the future. A can only prehend the features in question as aspects of D, if it prehends D as a term in these relations. And so, once more, the explanation presupposes that which it was to explain away.

If our argument thus far has been sound, we have seen that the temporal restriction which Whitehead would place on the mutual immanence of actual occasions is untenable in the context of his own system. On the Whiteheadian principle that every relation enjoyed by an actual occasion is an internal relation (more specifically, a prehension of the other relatum, which entails the presence of that object prehended within its constitution), we cannot account for the relations that undoubtedly do hold between actualities without asserting that every actual occasion contains within its experience all actual occasions — past, present, and future; and this implies that all actual occasions are subject to at least one unity of experience in which they are all contained. This means that Whitehead is unable to avoid in such a fashion the monistic conclusion to which he seems driven by his Principle of Internal Relatedness.

Granted that any actual occasion must include every other occasion without temporal restriction, there is still another feature of Whitehead's account of the inter-relations of actual entities which would prevent any actual occasion from being absolutely all-inclusive. We may term this feature "the abstractness of objectification." According to the philosophy of organism, a given actual occasion, A, does not prehend the total nature of each of its objects, but only a part of the nature of each. This abstractness in prehension is "required by the categoreal conditions for compatible synthesis in the novel unity." ⁴⁷ If the complete detail of each actuality in the datum were prehended there would be numerous elements which would be mutually incompatible for joint inclusion within an aesthetically harmonious synthesis.

⁴⁶ And since the restriction follows from the theory of the ultimate reality of time, that theory is likewise untenable on the basis of Whitehead's other principles. Indeed there are many serious external criticisms which can be, and have been, brought against the theory. But these matters lie outside the province of this paper.

⁴⁷ Whitehead, Process and Reality, p. 364.

It is evident that this theory of the abstractness of objectification does, if tenable, provide a second line of defense against monism. By its terms, even if an actual occasion does prehend all actualities - past, present, and future - it would not prehend every aspect of each of these actualities; although inclusive of all actualities, it would not be inclusive of the sumtotal of actuality. Hence there would still be a definite sense in which there was no absolutely all-inclusive unity of experience. But this theory is incompatible with the organic unity which Whitehead ascribes to every actual occasion. Now, to say that an actual occasion is an organic unity is to say that all its component prehensions are internally interrelated; the position of each of its prehensions in the whole (i.e., its relations to the whole and to the other prehensions) enters into the essence of that prehension, so that it could not conceivably be the individual which it is without being so related to those other prehensions within that actual occasion. It belongs to the essence of each prehension to perform its particular function in that particular occasion; it could not be conceived to occupy a place in another occasion (or a different place in the same occasion) and still be the prehension which it is.

There are many passages in which Whitehead expresses this integral connection of a prehension to the total concrete context in which it occurs:

Thus the feeling would be wrongly abstracted from its own final cause. This final cause is an inherent element in the feeling, constituting the unity of that feeling. An actual entity feels as it does feel in order to be the actual entity which it is.⁴⁸

The category of subjective unity is the reason why no feeling can be abstracted from its subject. For the subject is at work in the feeling, in order that it may be the subject with that feeling. The feeling is an episode in self-production, and is referent to its aim. This aim is a certain definite unity with its companion feelings. ⁴⁹ But conversely, no feeling can be abstracted either from its data, or its subject. It is essentially a feeling aiming at that subject, and

motivated by that aim.50

The only fact, then, is the actual occasion as the whole, the integrated totality of prehensions; each component prehension

⁴⁸ Whitehead, Process and Reality, p. 339.

⁴⁹ Ibid., p. 342.

⁵⁰ Ibid., p. 355.

has being only as a fragment, dependent for its individuality on its relations to the other fragments.⁵¹ An actual occasion conceived as an immediately given whole consists of prehensions which are essentially mutually sensitive as to their characters; conceived as a process of concrescence it consists of stages which are essentially referent to the final stage, the "satisfaction." Under either aspect it is an organic whole, the parts of which are each internally related to each other and to the whole.

On the basis of the above result, it is not difficult to show that any actual occasion, A, in prehending one component prehension, p, of another actual occasion, B, will thereby be prehending B in its full concreteness. For p essentially includes its relation to B as a complete totality; it is only the peculiar individual it is by standing in that relation to B. Hence to prehend p as the particular individual prehension it is, is to prehend its relation to B as a whole, including all its component prehensions in an integral unity. But A can only prehend p as in this relation provided it prehend the other term of the relation; viz., B as a whole. Hence it can only prehend p at all by prehending the concrete occasion in which p is contained.⁵²

Whitehead here again has failed to find an escape from monism which can be followed consistently with the essential principles of his philosophy. Since the component prehensions of an actual occasion are essentially interrelated, a given actual occasion. A, cannot include one component prehension of another actual occasion. B, without including B in its full concreteness. We have previously seen that A must contain, to some degree, every other actual occasion without exception; but

⁵¹ Ibid. pp. 29, 359-360.

⁵² It might seem that this goes against our pervasive experience of being able to perceive, or know by acquaintance, partial features of other actualities, even if we can't get a full understanding of these actualities. I can certainly perceive a house without being aware of its exact atomic structure, or its chemical constitutions, or even of the nature of its macroscopic furnishings. It must be remembered, however, that prehensions are by no means restricted to conscious mentality. We can, therefore, admit that we can consciously perceive certain aspects of an actuality while not consciously attending to the others, and also hold that the above arguments show that we must at the same time be prehending in some way these other aspects.

if so, we have now seen, it must contain each of them in complete detail; it must contain the absolute fulness of actuality.

Against this conclusion Whitehead has nothing further to offer. If, as we have argued, neither of the two restrictions heretofore considered is tenable in the context of Whitehead's system, we are relentlessly driven by the logic of internal relatedness and mutual immanence to the conclusion that any given actual occasion includes within its nature every actual occasion in its full concreteness. In other words, it follows from the Principle of Internal Relatedness that there is at least one immediate unity of experience inclusive of all finite experiences.⁵³ But this is the denial of the Principle of Pluralism the principle that actual occasions form a pluralistic set. Thus we have shown that, in spite of Whitehead's efforts to the contrary, his Principle of Internal Relatedness logically implies a monistic theory of actual occasions which is in direct contradiction to the pluralism which is so central to his system. And since one of the theories logically entails the denial of the other, they cannot both be maintained.

WILLIAM P. ALSTON

University of Michigan.

⁵³ Il also seems to follow, as pointed out above, that there could be only one such all-inclusive actual occasion (and hence only one actual occasion). But this implication would run into opposition from another Whiteheadian tenet, the Principle of Intensive Relevance; and the determination of the validity of this principle would require another long discussion. For our present purposes this is unnecessary, for whichever way that issue is decided it would still remain true that pluralism as here defined would be abandoned.

Critical Studies

ON COLLINGWOOD'S PHILOSOPHY OF HISTORY

I

R. G. Collingwood's The Idea of History (Clarendon Press, 1946) "is an essay in the philosophy of history." Philosophy of history, as Collingwood understood it, is of very recent origin. It emerged as a sequel to the rise of "scientific history" which took place in the latter part of the nineteenth century (254). If one assumes that "scientific history" is the highest or final form of man's concern with his past, the understanding of what the "scientific historian" does, or epistemology of history, may become of philosophic interest. And if the older or traditional branches of philosophy cannot make intelligible the "new historical technique" or solve the problems "created by the existence of organized and systematized historical research"; if, in other words, "the traditional philosophies carry with them the implication that historical knowledge is impossible" (5-6), epistemology of history becomes of necessity a philosophic concern or a philosophic discipline. But philosophy of history must be more than epistemology of history. In the first place, epistemology of history is likely to be of vital concern only to certain technicians, and not to men as men. Above all, thought about historical thought must be thought about the object of historical thought as well. Hence philosophy of history must be both epistemology of history and metaphysics of history (3, 184). Philosophy of history comes then first to sight as an addition to the traditional branches of philosophy. But philosophy hardly permits of mere additions. Certainly philosophy of history cannot be a mere addition: philosophy of history necessarily entails "a complete philosophy conceived from an historical point of view" (7, 147). For the discovery on which philosophy of history is based concerns the character of all human thought; it leads therefore to an entirely new understanding of philosophy. In other words, it was always admitted that the central theme of philosophy is the question of what man is, and that history is the knowledge of what men have done; but now it has been realized that man is what he can do, and "the only clue to what man can do" is what he has done (10); therefore, "the so-called science of human nature or of the human mind resolves itself into history" (220, 209). Philosophy of history is identical with philosophy as such, which has become radically historical: "philosophy as a separate discipline is liquidated by being converted into history" (x).

Collingwood was prevented by his death from elaborating his philosophy of history in the full sense of the term. He believed that he could do no more than to attempt "a philosophic inquiry into the nature of history regarded as a special type or form of knowledge with a special type of object" (7). Since philosophy of history in the narrower sense admittedly points to philosophy of history in the comprehensive sense. it might seem that Collingwood unjustifiably postponed the discussion of the fundamental issue. But it is perhaps fairer to say that philosophy of history in the comprehensive sense presupposes philosophy of history in the narrower sense, or that the fusion of philosophy and history presupposes the soundness or adequacy of "scientific history": if the historical understanding of the last four or five generations is not decisively superior to the historical understanding that was possible in the past, the conversion of philosophy into history loses its most convincing, or at least its most persuasive, justification.

Scientific history, being "now a thing within the compass of everyone" (320), is the cooperative effort of a very large number of contemporaries which is directed toward the acquisition of such knowledge as "ideally" forms part of "a universal history" or of knowledge of "the human past in its entirety" (27, 209). It is a theoretical pursuit; it is "actuated by a sheer desire for truth" and by no other concern (60-61). The attitude of the scientific historian, however, is not that of a spectator. Knowledge of what men have done is knowledge of what men have thought: "All history is the history of thought" (215, 304). Scientific history is thought about thought. Past thought cannot be known as such except by being re-thought, or re-enacted, or re-lived, or re-produced (97, 115, 218). For the scientific historian, the past is not something foreign, or dead, or outside his mind: the human past is living in his mind,

though living as past. This does not mean that the entire past can be re-enacted by every scientific historian; there must be a kind of sympathy between the historian's thought and his object; and in order to be truly alive, "the historian's thought must spring from the organic unity of his total experience, and be a function of his entire personality with its practical as well as its theoretical interests" (305). Since "all thinking is critical thinking" and not a mere surrender to the object of thought, re-thinking of earlier thought is identical with criticism of earlier thought (215-16, 300-01). The point of view from which the scientific historian criticizes the past is that of the present of his civilization. Scientific history is then the effort to see the human past in its entirety as it appears from the standpoint of the present of the historian's civilization (60, 108, 215). Yet history will not be self-knowledge if the historian sees the past in the light of the present of his civilization without making that present his primary theme. The scientific historian's task is therefore to show how the present of his civilization, or the mind of the present-day, or that "determinate human nature" which is his civilization, has come into existence (104, 169, 175, 181, 226). Since scientific history is a peculiarity of modern Western thought, it may be described as the effort of present-day Western man to understand his peculiar humanity and thus to preserve it or enrich it.

Since genuine knowledge of the past is necessarily criticism and evaluation of the past from the point of view of the present, it is necessarily "relative" to the present, i.e., to the present of a given country or civilization. The point of view of a given historian is "valid only for him and people situated like him" (60, 108). "Every new generation must rewrite history in its own way" (248). Objectivity in the sense of universal validity would then seem to be impossible. Collingwood was not disturbed by this danger to "scientific" history (cf. 265). There were two reasons for his confidence. In the first place, the belief in progress, and hence in the superiority of the present to the past, still lingered on in his thought. He could therefore believe that if historical knowledge is relative to the present, it is relative to the highest standpoint which has ever existed. To see that the belief in progress survived in

Collingwood's thought, it almost suffices to look at the Table of Contents of his book: he devoted more space to Croce, to say nothing of other present-day thinkers, than to Herodotus and Thucydides. He took it for granted that the historian can and must distinguish "between retrograde and progressive elements" in the phenomena which he is studying (135). More than half of his book is devoted to a comparison of the modern scientific conception of history with "the medieval conception of history with all its errors" (56) and the classical conception with its grave "defects" (41-42). The second reason why Collingwood was not disturbed by the "relativity" of all historical knowledge was his belief in the equality of all ages. "The present is always perfect in the sense that it always succeeds in being what it is trying to be," or the present has no standard higher than itself (109). There are no ages of decline or of decay (164). Augustine looked at Roman history from the point of view of an early Christian, and Gibbon did so from that of an enlightened eighteenth century Englishman: "there is no point in asking which was the right point of view. Each was the only possible for the man who adopted it" (xii). The historian who sees the past from the point of view of a present must not be worried by the prospect of a future progress of historical knowledge: "the historian's problem is a present problem, not a future one: it is to interpret the material now available, not to anticipate future discoveries" (180). Being thus protected against the surprises which the future may have in store, the scientific historian can be satisfied that the historical knowledge which is relative to the present, and is based on the material accessible at present, fulfills all the requirements of certainty or science. The fact that all historical knowledge is relative to the present means that it is relative to the only standpoint which is possible now, to a standpoint which is in no way inferior to any standpoint which was possible in the past or which will be possible in the future. Regardless of whether or not Collingwood found a way for reconciling the two different reasons indicated, each of them, if sound, would justify him in assuming that understanding of the past from the point of view of the present is unobjectionable, and in fact inevitable.

The procedure which we have just outlined is characteristic of *The Idea of History*. Collingwood moved consciously and

with enthusiasm toward a goal which most of his contemporaries were approaching more or less unconsciously and haltingly, that goal being the fusion of philosophy and history. But he was not very much concerned with examining the means by which he tried to reach his goal. He vacillated between two different views of history, the rationalistic view of Hegel, and a non-rationalistic view. He never clearly realized that these two views are mutually incompatible. The historical reason for this failure was his lack of acquaintance with Nietzsche's epoch-making critique of "scientific history."

There is a tension between the idea of universal history and the view that in history "the mind of the present day apprehends the process by which this mind itself has come into existence through the mental development of the past" (169). If the modern Western historian studies Greek civilization, he may be said to re-enact the genesis of his own civilization, which has formed itself "by reconstructing within its own mind the mind of the Hellenic world" and thus to enter upon the possession of his inheritance (163, 226-27); he may be said to attempt to understand himself as modern Western man, or to mind his own business. But the case of the modern Western historian who studies Chinese or Inca civilization is obviously different. Collingwood did not reflect on this difference. He justly rejected Spengler's view that "there is no possible relation whatever between one culture and another." But he failed to consider the fact that there are cultures which have no actual relations with one another, and the implications of this fact: he dogmatically denied the possibility of "separate, discrete" cultures because it would destroy the dogmatically assumed "continuity of history" as universal history (161-64, 183). - According to one view held by Collingwood, the idea of scientific history, "the idea of an imaginary picture of the past [is], in Kantian language, a priori . . . it is an idea which every man possesses as part of the furniture of his mind, and discovers himself to possess in so far as he becomes conscious of what it is to have a mind" (248); scientific history is therefore the actualization of a potentiality of human nature. According to another view also held by Collingwood, one cannot speak of the furniture of the human mind, and not even of the human mind, which as such would be subject to "permanent and unchanging laws"; the idea of scientific history is not, in principle, coeval with the human mind but is itself "historical": it has been acquired by Western man on the basis of his unique experience (of the Christian experience in particular); it is rooted in modern Western thought and its needs: it is meaningful only for modern Western thought (xii, 12, 48-49, 82, 224, 226, 255). - Collingwood regarded history as a theoretical pursuit, but he also said that the historian's thought must be "a function of his entire personality with its practical as well as its theoretical interests." - All history, Collingwood repeatedly said, is the history of thought or of rational activity or of freedom (215, 304, 315, 318): one cannot abandon "Hegel's belief that history is rational" without abandoning history itself (122); by speaking of "the contingency of history," the historian "expresses [the] final collapse of his thought" (151). Accordingly, Collingwood held that understanding of the thought of the past is not only compatible with criticism of thought of the past from the point of view of the present, but inseparable from it. On the other hand, however, he tended to believe that the ultimate facts of history are free choices which are not justifiable by rational activity; or that the ultimate facts of history are mere beliefs; and hence that history is not rational or that it is radically contingent or that it is, so to speak, a sequel of different original sins. Accordingly, he tended to hold that the historian cannot criticize the thought of the past but must remain satisfied with understanding it (cf. 316-18).

Collingwood's failure to clarify his position sufficiently can be explained in part by the need which he felt "to engage in a running fight" with positivism or naturalism (i.e., "the confusion between historical process and natural process") (228, 181-82). His main preoccupation was with vindicating "the autonomy of history" against the claims of modern natural science. The view that historical knowledge is partly dependent on modern natural science was based on the fact that man's historical life is dependent on nature; and man's knowledge of nature is not identical with modern natural science. Collingwood was therefore driven to assert "the autonomy of history" without any qualification: "the historian is master in his own house; he owes nothing to the scientist or to anyone else," for

"ordinary history," rightly understood, "contains philosophy inside itself" (155, 201). History does not depend upon authority nor on memory (236-38). "... in history, just as there are properly speaking no authorities, so there are properly speaking no data" (243). "Freed from its dependence on fixed points supplied from without, the historian's picture of the past is thus in every detail an imaginary picture, and its necessity is at every point the necessity of the a priori imagination. Whatever goes into it, goes into it not because his imagination passively accepts it, but because it actively demands it" (245). It is because of its "autonomy" that history must be universal history (246): truth is totality. Collingwood should not have hesitated to call this view "idealistic" (cf. 159). It is indeed not a solipsistic view: historical thought is both autonomous and objective; the historian's house "is inhabited by all historians" (155). More precisely, it is inhabited by all present day historians. It is a house without windows: the mind of the present day is autonomous or master in its own house because it cannot understand the thought of the past without criticizing it, i.e., without transforming it into a modification of present day thought, or because it is not disturbed by problems which it cannot solve ("To ask questions you see no prospect of answering is the fundamental sin in science" - 281) or because it is not disturbed by the possibilities of the future ("the only clue to what man can do is what man has done" - 10, 180). A particularly noteworthy consequence of Collingwood's idealism is the banishment of biography from history: the limits of biography are "biological events, the birth and death of a human organism: its framework is thus a framework not of thought but of natural process" (304). This decision had the additional advantage of keeping the subjectivity of scientific history within limits which, for Collingwood, were reasonable. If the "biographical" is sub-historical, it will as little go into the making of the subject which acquires or possesses historical knowledge, as it will become an element of the object of historical knowledge. Historical knowledge will not become relative to the individual historian. It will retain its objectivity by being relative to "the mind of the present day." A difficulty is created by the circumstance that "the historian's thought must spring from the organic unity of his total experience." which experience, being total, could be thought to include his "immediate experience with its flow of sensations and feelings" and those "human emotions [which] are bound up with the spectacle of [his] bodily life" (304): "total experience" would seem to include the most "personal" experiences.

To do justice to Collingwood's idea of history, one must examine his practice as a historian. The largest part of his book is devoted to a history of historical knowledge. That history is on the whole conventional. In studying earlier thinkers. Collingwood never considered the possibility that the point of view from which the present day reader approaches them, or the questions which he addresses to them, might be in need of a fundamental change. He set out to praise or blame the earlier thinkers according to whether they helped or hindered the emergence of scientific history. He did not attempt to look at scientific history, for once, from the point of view of the earlier thinkers. What is not quite conventional in Collingwood's history, are some of his judgments: he had the courage to wonder whether Thucydides and Tacitus deserve the title of historians (29, 38-39). Furthermore, his history of historical knowledge is somewhat obscured by an ambiguity which he did not consistently avoid. His discussion of "Human nature and human history" culminated in the assertion that historical knowledge is coeval with the historical process, because the historical process is a process in which man inherits the achievements of the past, and historical knowledge is the way in which man enters upon the possession of that inheritance (226-27; cf. 333-34). In this crucial context Collingwood thus identified historical knowledge with accepting a tradition or living in a tradition. As a rule, however, he assumed that historical knowledge is not coeval with historical life but is an "invention" made at a certain time in Greece (19) and developed later on by the heirs of the Greeks.

The most revealing section of Collingwood's history of historical knowledge is his statement about the Greek conception of history. The Greeks created scientific history. This fact is paradoxical, for Greek thought was based "on a rigorously anti-historical metaphysics" (18-20). The "chief category" of that metaphysics "is the category of substance," and

"a substantialist metaphysics implies a theory of knowledge according to which only what is unchanging is knowable" (42). "Therefore history ought to be impossible." i.e., impossible as a science; history must be relegated to the realm of "opinion." Yet the very view that what is truly, or what is truly knowable. is the permanent, implied a fundamental distinction between the permanent and the changeable, and hence the insight that change is necessary: the Greeks' pursuit of the eternal presupposed "an unusually vivid sense of the temporal." In addition, they lived in a period of rapid and violent change: hence their "peculiar sensitiveness to history." For this reason however "their historical consciousness" was of a peculiar kind: it was "not a consciousness of age-long tradition molding the life of one generation after another into a uniform pattern; it was a consciousness of violent περιπέτειαι, catastrophic changes from one state of things to its opposite ... (22; cf. 26, 34). But since they believed that only the permanent is knowable or intelligible, they regarded "these catastrophic changes in the condition of human life" as unintelligible. They did not deny "that in the general pattern of these changes certain antecedents normally led to certain consequents," and that these sequences can be established by observation; but they could not tell why "certain antecedents normally led to certain consequents": "There is here no theory of causation." "This conception of history was the very opposite of deterministic": the sequences of antecedents and consequents are not necessary; they can be modified by the men who know of them; "thus the Greeks had a lively and indeed a naïve sense of the power of man to control his own destiny." Since the Greeks were compelled to consider history "as, at bottom, not a science, but a mere aggregate of perceptions," they had to identify "historical evidence with the reports of facts given by eye witnesses of these facts." They did not uncritically accept those reports. But their criticism could not go beyond making quite certain whether the eye witness really told what he had seen, and reaching a decision as to which of various conflicting reports deserved to be accepted. This conception of historical evidence limited history to the study of "events which have happened within living memory to people with 568

whom [the historian] can have personal contact"; it made impossible scientific history of the remote past: the historian cannot be more than "the autobiographer of his generation" (22-27).

Some critical remarks seem to be necessary. When asserting that thinking historically and thinking in terms of substance are incompatible, Collingwood presupposed that "it is metaphysically axiomatic that an agent, being a substance, can never come into being and can never undergo any change of nature" (43). Did the Greeks then not know that human beings, for example, come into being? Or is it necessary to refer to Aristotle's statement that coming into being simply is said only of substances? Why then should the Greeks have been unable to observe and to describe the coming into being of substances and their changes? Collingwood asserted that in "substantialist" classical historiography "all the agencies that appear on the stage of history have to be assumed readymade before history begins" (45) and that the classics therefore regarded nations and cities as substances, "changeless and eternal" (44). He did not even attempt to prove that the classics conceived of cities and nations as substances. But even if they did, their almost daily experience would have convinced them that cities at any rate are not "changeless and eternal" substances, that they are founded and grow and decay and perish, to say nothing of other changes which they undergo. Why then should the Greeks have been unable to observe and describe the coming into being and the changes of cities? To say nothing of the fact that it is safe to infer what men could do from what they did. "... the Greeks could not even contemplate the possibility of raising the problem which we should call the problem of the origin of the Hellenic people" (34). But, to take the most obvious case, were there no Greek thinkers who taught that the human race had come into being, that in the beginning men roamed in forests, without social bonds of any kind and in particular without language, and hence without the Greek language? Certainly these thinkers did not merely contemplate the possibility of raising the problem of the origin of the Hellenic people, but they did raise it and, according to their lights, solved it. Collingwood did not see that the reflections of the Greek philosophers on the nature and origin of language are equivalent to reflections on the nature and origin of nations. If they did not attempt to give historical accounts of the genesis of this or that nation, or of any nation, they had reasons like these: They did not have at their disposal historical evidence of events of this kind; they regarded the city as a higher form of society than the nation; and they thought that societies in their full vigor and maturity were more instructive regarding the highest possibilities of man than are societies newly coming into being. There may be a connection between these views and "substantialism." It suffices to note that Collingwood did not even try to reveal that connection. Prudence would have dictated to Collingwood to refrain from speaking of "substantialism" and to limit himself to saying that the classics were, for whatever reason, more concerned with the permanent and hence with the recurrent than with what is merely temporal and local, or that they believed that the unique can ultimately be understood only in the light of the permanent or recurrent. From this he could legitimately have concluded that from the point of view of the classics, history is inferior in dignity to philosophy or science. To prove his thesis, it would have been necessary for him to show, in addition, that the primacy of the concern with the permanent or recurrent precludes or endangers serious concern with what happens here and now or what happened there and then. He did not show this. To say nothing of other considerations, one may be chiefly concerned with the permanent or recurrent and yet hold that a given unique event (the Peloponnesian War, for example) supplies the only available basis for reliable observation which would enable one to form a correct judgment about certain recurrences of utmost importance. A man who held this view would of course study that unique event with utmost care, and, assuming that he was a superior man, he might have surpassed as a historian, i.e., as a man who understands actions of men, all the scientific historians of the nineteenth and twentieth centuries.

Collingwood held that the Greeks had a "historical consciousness" of a particular kind: it was "not a consciousness of age-long tradition molding the life of one generation after

another into a uniform pattern," but a consciousness of "catastrophic changes" (22). This statement is, to say the least, very misleading. "The Greeks" were perfectly conscious of the existence of "age-long traditions molding the life of one generation after another into a uniform pattern." But they believed, or at any rate Plato believed or suggested, that Greek life - in contradistinction especially to Egyptian life was not dominated by such traditions: "you Greeks are always children . . . you are, all of you, young in soul; for you do not possess in your souls a single ancient opinion transmitted by old tradition nor a single piece of learning that is hoary with age." The Greeks were less dominated by age-long traditions than were other nations because there lived in their midst men who had the habit of questioning such traditions, i.e., philosophers. In other words, there was a greater awareness in Greece than elsewhere of the essential difference between the ancestral and the good. On the basis of this insight there existed in classical Greece "a historical consciousness," not merely of "catastrophic changes" but also of changes for the better, of progress, and this consciousness was a consciousness not merely of progress achieved but also of the possibility of future progress. Collingwood did not even allude to this element of "the Greek conception of history." He apparently never tried to understand "the historical consciousness" which expresses itself in the first book of Aristotle's Metaphysics, for example. Consideration of this book alone would have sufficed to make him hesitate to write that "the Greek historian was only the autobiographer of his generation" (27).

But let us concede that a man like Thucydides was primarily concerned with "catastrophic change" rather than with long periods in which practically no change, or only slow changes for the better, took place; and let us assume that Collingwood has given an account, based on Thucydides' work, of this preference, although Collingwood did not even attempt to do this. Was he entitled to say that the Greeks were forced to regard catastrophic changes as unintelligible, i.e., as in no way traceable to determinate causes? The mere fact that he could not help censoring Thucydides for being "the father of psychological history" which is "natural science of a

special kind" (29) would seem to prove that there was at least one Greek who regarded catastrophic change as intelligible. According to Collingwood, the Greeks regarded the change from a state of extreme wealth or power to a state of extreme poverty or weakness, as a mysterious rhythm; "the universal judgment that very rich men, as such, fall... is, in Aristotle's view, only a partially scientific judgment, for no one can say why rich men should fall" (24). If Collingwood had considered the analysis of the characters of the rich and the powerful in the second book of the *Rhetoric*, or the analysis of tyranny and dynastic oligarchy in the *Politics*, he could have told us that Aristotle had a good explanation for the fall of rich and powerful men if they are not virtuous or lucky. Collingwood mistook for no theory of causation what is in effect a theory of causation that includes chance as a cause of historical events.

Only because Collingwood disregarded, among other things, what the classics have to say about the power of chance, could he confidently assert that "the Greeks had a lively and indeed a naïve sense of the power of man to control his own destiny" (24) or that for Hellenic thought "self-consciousness [was] a power to conquer the world" (36) or that classical thought implied "that whatever happens in history happens as a direct result of the human will" (41). It taxes the imagination to understand how the same man could, have written these sentences a few pages after he had written "that these catastrophic changes in the condition of human life which were to the Greeks the proper theme of history, were unintelligible" (22).

As for Collingwood's remark that, for the Greeks, history was "at bottom... a mere aggregate of perceptions" (24), it suffices to say that one page later he noted that men like Herodotus and Thucydides succeeded in calling up a fairly "coherent" "historical picture" of the events which they studied. In his discussion of the Greek conception of historical evidence, he was silent about the basic distinction between seeing with one's own eyes and hearsay, and the use which the classical historians made of that distinction for evaluating traditions or reports. In particular, he did not consider that seeing with one's own eyes includes understanding of the

nature of man and of the nature of political things, an understanding which fulfills in Greek history approximately the same function which "historical imagination" fulfills in Collingwood's "scientific history."

Collingwood's account of the classical conception of history, which had to be "in every detail an imaginary picture" in order to conform with his standards of historical truth (cf. 245), indirectly reveals more about "the idea of history" than do all the subsequent sections of his book. The idea of history is more than the view that knowledge of what men have done or thought is possible or necessary. It is the view that such knowledge properly understood is identical with philosophy or must take the place of philosophy. The idea of history thus understood is indeed alien to classical thought. According to Collingwood, it could not emerge before classical "substantialism" was abandoned and classical "humanism" was profoundly modified. If history is the account, or the study, of what men have done, and philosophy is the study of something which is presupposed by all human doings, the idea of history requires in the first place that the apparent presuppositions of all human doings be resolved into products of human doings: this is what Collingwood meant by the need for abandoning "substantialism." The apparent presuppositions of all human doings are objects of human knowledge, as distinguished from the products or results of human action. The first step in the direction of the idea of history was therefore that the distinction between knowledge and action or between theory and practice be questioned. Knowledge had to be conceived as a kind of making or production. Collingwood referred in the usual manner to Vico's verum et factum convertuntur (64). But he failed to go back to Vico's source, i.e., to Hobbes, and hence he could rest satisfied with the conventional way of describing the genesis of the idea of history. Now, if the thinker or maker is man as man, or every individual regardless of time and place, philosophy remains "unhistorical." If there is to be an essential connection between thought, or the content of thought, and time and place, what we know or think must be such a making as, is essentially dependent on the making of earlier men, or rather of earlier men who lived "here," and yet it must be different from earlier thought. It cannot be different from earlier thought if it could have been anticipated, i.e., thought, by earlier men: it must be the unforeseen and unforeseeable outcome of earlier thought. It is this requirement which Collingwood had in mind when he demanded the abandonment or radical modification of Greek "humanism" which attributed "far too little to the force of a blind activity embarking on a course of action without foreseeing its end and being led to that end only through the necessary development of that course itself" (42), i.e., without being led to that end by the plan of a god or of nature (55, 57, 58, 81, 104). He described the requirement in question somewhat more accurately when he contrasted Greek thought with the determinism of seventeenth century natural science which laid the foundation for conceiving of thought as such, and of every "stage" of thought, as the necessary and unintended "product of a process" (23, 57, 58, 81, 87). For the reason indicated, he failed, however, to raise the question regarding the connection between the conception of thinking as making and the peculiar "determinism" of modern natural science. He thus failed to see that the basic stratum of "the idea of history" is a combination of the view that thinking is making, or "creative," with the need, engendered by that view, of giving a "deterministic" account of thinking, or such a "genetic" account as presupposes at no point anything except "motion" or "process." Collingwood's "idealism" prevented him from looking beyond the antagonism of "idealism" and "naturalism" or from seeing that "history" and "scientific materialism" are inseparable from each other. (Compare, however, the remark on p. 269 about the kinship between scientific history and Baconian natural science.)

II

Collingwood did not prove "by deed" the superiority of scientific history to the common-sense type of history which prevailed, on the most different levels, in the past. His most important statements are errors which competent men in earlier times would not have committed simply because they were

more careful readers than we have become. Scientific history is based on the assumption that present day historical thought is the right kind of historical thought. When it is confronted with the fact that earlier historical thought is different from present day historical thought, it naturally concludes that earlier historical thought is defective. And no one can be blamed if he does not study very carefully such doctrines or procedures as he knows in advance to be defective in the decisive respect. Collingwood wrote the history of history in almost the same way in which the eighteenth century historians, whom he censored so severely, are said to have written history in general. The latter condemned the thought of the past as deficient in full reasonableness; Collingwood condemned it as deficient in the true sense for history.

This is not to deny that Collingwood also believed in the equality of all ages and that he therefore tended to regard the historical thought of any one period as equally sound as that of any other period. One might think that to the extent to which he held that belief, he would have tried to understand the historical thought of each period of the past on its own terms, without measuring it by the standard of scientific history. Yet the belief in the equality of all ages leads to the consequence that our interpretation of the thought of the past, while not superior to the way in which the thought of the past interpreted itself, is as legitimate as the past's self-interpretation and, in addition, is the only way in which we today can interpret the thought of the past. Accordingly, there arises no necessity to take seriously the way in which the thought of the past understood itself. In other words, the belief in the equality of all ages is only a more subtle form of the belief in progress. The alleged insight into the equality of all ages which is said to make possible passionate interest in the thought of the different ages, necessarily conceives of itself as a progress beyond all earlier thought: every earlier age erroneously "absolutized" the standpoint from which it looked at things and therefore was incapable of taking very seriously the thought of other ages; hence earlier ages were incapable of scientific history.

The two beliefs which contended for supremacy in Collingwood's thought implied that earlier thought is necessarily relative to earlier times. "The Republic of Plato is an account, not of the unchanging ideal of political life, but of the Greek ideal as Plato received it and reinterpreted it. The Ethics of Aristotle describes not an eternal morality but the morality of the Greek gentleman. Hobbes' Leviathan expounds the political ideas of seventeenth century absolutism in their English form. Kant's ethical theory expresses the moral convictions of German pietism ... (229). Collingwood understood then the thought of a time in the light of its time. He did not then re-enact that thought. For to re-enact the thought which expresses itself in Plato's Republic, for example, means to understand Plato's description of the simply good social order as a description of the true model of society with reference to which all societies of all ages and countries must be judged. Collingwood's attitude towards the thought of the past was in fact that of a spectator who sees from the outside the relation of an earlier thought to its time.

The deficiencies of Collingwood's historiography can be traced to a fundamental dilemma. The same belief which forced him to attempt to become a historian of thought, prevented him from becoming a historian of thought. He was forced to attempt to become a historian of thought because he believed that to know the human mind is to know its history, or that self-knowledge is historical understanding. But this belief contradicts the tacit premise of all earlier thought, that premise being the view that to know the human mind is something fundamentally different from knowing the history of the human mind. Collingwood therefore rejected the thought of the past as untrue in the decisive respect. Hence he could not take that thought seriously, for to take a thought seriously means to regard it as possible that the thought in question is true. He therefore lacked the incentive for re-enacting the thought of the past: he did not re-enact the thought of the past.

We draw the conclusion that in order to understand the thought of the past, one must doubt the view which is at the bottom of scientific history. One must doubt the principle which is characteristic of "the mind of the present day." One

must abandon the attempt to understand the past from the point of view of the present. One must take seriously the thought of the past, or one must be prepared to regard it as possible that the thought of the past is superior to the thought of the present day in the decisive respect. One must regard it as possible that we live in an age which is inferior to the past in the decisive respect, or that we live in an age of decline or decay. One must be swayed by a sincere longing for the past.

Collingwood had to face this necessity when he had to speak of Romanticism. According to him, Romanticism is in danger of developing into "a futile nostalgia for the past," but "that development was checked by the presence in Romanticism of ... the conception of history as a progress" (87). This remark lacks precision. Its deficiency is partly due to Collingwood's insufficient familiarity with the German intellectual movement around the year 1800. For instance in his statement on Friedrich Schiller (104-105), he limited himself to a survey of Schiller's lecture on the value of universal history without taking any notice of Schiller's essay on naïve and sentimental poetry. Similarly he asserted that "Hegel wrote the first sketch of his philosophy of history in the Heidelberg Encyclopædia" (111). The romantic soul, we prefer to say, is characterized by longing, by "futile" longing, by a longing which is felt to be superior to any fulfillment that is possible "now," i.e., in post-revolutionary Europe. A perfect expression of Romanticism is Madame Bovary: the dead Emma, who, in spite of, or because of, the fact that she had an "esprit positif," had spent her life in a longing that led to nothing but failure and degradation, is more alive than the contemporary representatives of the ancient faith and the modern faith who, with the corpse of Emma between them, engage in a noisy disputation, i.e., share between themselves the rule over the nineteenth century. True Romanticism regards the highest possibility of the nineteenth or twentieth century, "futile" longing, as the highest possibility of man, in so far as it assumes that the noble fulfillments of the past were based on delusions which are now irrevocably dispelled. True Romanticism believes that while the past was superior to the present as regards "life" or "culture" or "art" or "religion" or the nearness of God or gods, the present is superior to the past as regards the understanding of "life" or "culture," etc. It believes therefore that the present is superior to the past in regard to knowledge of the decisive truth, i.e., in the decisive respect. It therefore never submits its notions of "life" or "culture" or "art" or "religion" to a criticism which is enlightened by what the assumed models of "life" or "culture," etc., explicitly thought about these themes. Hence Romanticism perpetuates the belief in the superiority of modern thought to earlier thought, and Romantic history of thought is fundamentally as inadequate, or as "un-historical," as non-romantic, progressivist history of thought.

Collingwood believed that "in history as it actually happens there are no mere phenomena of decay: every decline is also a rise" (164). This sanguine statement cannot be reconciled with his remark that if we abandoned scientific history, "we should be exemplifying and hastening that downfall of civilization which some historians are, perhaps prematurely, proclaiming" (56). Here Collingwood admitted that a decline which is not "also a rise" is possible. Yet this momentary insight did not bear fruit in his understanding of earlier thought. He blamed Tacitus for representing history "as essentially a clash of characters, exaggeratedly good and exaggeratedly bad," and he blamed the philosophies of Tacitus' age as "defeatist philosophies which, starting from the assumption that the good man cannot conquer or control the wicked world, taught him how to preserve himself unspotted from its wickedness" (39-40). Since Collingwood dogmatically excluded the possibility of unqualified decay, he could not imagine that there might be ages in which virtuous political action is impossible, and "defeatist" withdrawal is the only sane course of action; he could not consider the possibility that such ages may allow of an excess in wickedness in tyrannical rulers, and of a heroic virtue in their victims, for which there are no parallels in happier epochs. His "historical consciousness" or historical imagination did not leave room for the possibility which Tacitus assumes to have been a fact. His historical consciousness could not be broadened by a study of Tacitus because scientific history recognizes no authority, but is master in its own house: it is not guided by a presumption in favor of the judgments which the wise men of old passed on their own times.

Collingwood was forced to admit the possibility of decline when he discussed the conditions under which progress is possible. For to admit that progress is possible and not necessary means to admit the possibility of decline. But it is precisely his discussion of the conditions of progress which shows how largely he remained under the spell of the belief in necessary progress or how far he was from understanding the function of historical knowledge. Progress, he said, "happens only in one way: by the retention in the mind, at one phase, of what was achieved in the preceding phase" (333). The retention of earlier achievements is "historical knowledge" (326). It is therefore "only through historical knowledge that [progress] comes about at all" (333). Collingwood assumed that "what was achieved in the preceding phase" has merely to be retained; he did not consider the possibility that it may have to be recovered because it had been forgotten. Accordingly, he identified historical knowledge, not with the recovery of earlier achievements, but with their retention: he uses Aristotle's knowledge of Plato's philosophy, and Einstein's knowledge of Newtonian physics, as examples of historical knowledge (333-34). He further assumed that progress requires the integration of earlier achievements into a framework supplied by the later achievement. He did not consider the possibility that progress may consist in separating recent achievements from their present framework and integrating them into an earlier framework which must be recovered by historical knowledge proper. But whatever might be true of progress, certainly the awareness of progress requires that the thought of the past be known as it actually was, i.e., as it was actually thought by past thinkers. For, if to understand the thought of the past necessarily means to understand it differently from the way the thinkers of the past understood it, one will never be able to compare the thought of the present with the thought of the past: one would merely compare one's own thought with the reflection of one's own thought in ancient materials or with a hybrid begotten by the intercourse of one's own thought with earlier thought. What we might be inclined to regard as decisive insights alien to the thought of the past may in fact be delusions produced by the oblivion of things known to the thinkers of the past. Awareness of progress presupposes the possibility of understanding the thought of the past "as it really has been." It presupposes the possibility of historical objectivity.

Collingwood implicitly denied the possibility of historical objectivity by asserting that criticism of the thought of the past from the point of view of the present is an integral element of understanding the thought of the past (215). The historian is forced to raise "such questions as: Was this or that policy a wise one? Was this or that economic system sound? Was this or that movement in science or art or religion an advance, and if so, why?" (132). Such questions cannot be answered except from the standpoint of the historian's time (60, 108). This conclusion depends in the first place on the premise that there are no unchangeable standards for judging human actions or thoughts. But it depends also on the further premise that the historian's primary task is to pass judgment on the past. Yet before one can pass judgment on the wisdom of, for example, a given policy, one must establish the character of that policy. "For example, to reconstruct the history of a political struggle like that between the Roman emperors of the first century and the senatorial opposition, what the historian has to do is to see how the two parties conceived the political situation as it stood, and how they proposed to develop that situation: he must grasp their political ideas both concerning their actual present and concerning their possible future" (115). The primary task of the political historian would then seem to consist in understanding a given situation and given ends as they were understood by those who acted in the situation. The contemporaries of a struggle that is similar to the contest between the Roman emperors and the senatorial opposition have an easier access to that historical phenomenon than have people who lack experience of this particular kind of politics. But this does not make the understanding of the phenomenon in question relative to different situations: the difference in regard to the length and the diffi580

culty of the way towards the goal does not affect the goal itself. In addition, "historical imagination" liberates the historian from the limitations caused by the experiences peculiar to his time.

It may be objected that the very selection of the theme implies the inescapable subjective element: the reason for the historian's interest in a given situation is different from the reason for the actors' interest in it. The reason for the historian's interest in a historical phenomenon expresses itself in the questions which he addresses to the phenomenon concerned and hence to his sources, and this question is in principle alien to his sources. "The scientific historian no doubt spends a great deal of time reading . . . Herodotus, Thucydides, Livy, Tacitus, and so forth ..., but he reads them ... with a question in his mind, having taken the initiative by deciding for himself what he wants to find out from them . . . the scientific historian puts them to the torture, twisting a passage ostensibly about something quite different into an answer to the question he has decided to ask" (269-70). There is no doubt that one may use the classical historians as a quarry or as ruins, to supply oneself with materials for erecting the edifice called the economic history of classical antiquity, for example. In doing this one makes the assumption that economic history is a worthwhile enterprise, and this assumption is indeed apparently relative to the preoccupations of the nineteenth and twentieth centuries, and alien to the classical historians. An intelligent or conscientious use of the classical historians for a purpose alien to them requires, however, a clear recognition of the fact that that purpose is alien to them and of the reason for that being so. It therefore requires that the classical historians first be understood on their own terms, i.e., as answering their own questions, and not the questions with which the modern historian tortures them. Collingwood admitted this necessity in his way: "The question [the scientific historian] asks himself is: 'What does this statement mean?' And this is not equivalent to the question 'What did the person who made it mean by it?' although that is doubtless a question that the historian must ask, and must be able to answer" (275). But this admission is much too weak. The answer to the question "What did the person who made the statement mean by it?" must precede the answer to the question "What does this statement mean within the context of my question?" For "the statement" is the statement as meant by the author. Before one can use or criticize a statement, one must understand the statement, i.e., one must understand it as its author consciously meant it. Different historians may become interested in the same statement for different reasons: that statement does not alter its authentic meaning on account of those differences.

Collingwood severely criticized "the scissors-and-paste historian" who reads the classical historians "in a purely receptive spirit, to find 'out what they said" and "on the understanding that what they did not tell him in so many words he would never find out from them at all" (269). But he did not realize that both "the scissors-and-paste historian" and the scientific historian make the same mistake: they use the classical historians for a purpose alien to the latter before having done justice to the purpose of the classical historians. And both make this identical mistake for the same reason: they take "history" for granted. Whatever may be the standpoint or the direction of interest or the guiding question of the present day historian, he cannot use his sources properly if he does not, to begin with, rigorously subordinate his question to the question which the author of his sources meant to answer, or if he does not, to begin with, identify his question with the question consciously raised by the author whose work he intends to use. The guiding question of the historian who wants to use Herodotus, for example, must become, for some considerable time, the question as to what question was uppermost in Herodotus' mind, i.e., the question of what was the conscious intention of Herodotus, or the question regarding the perspective in which Herodotus looked at things. And the question regarding Herodotus' guiding intention, as well as the answer to it, is in no way affected by the diversity of questions with which modern historians approach Herodotus. In attempting to answer the question regarding Herodotus' intention, one must not even assume that Herodotus was a "historian." For in making this assumption one is likely to imply that he was not a "philosopher" and thus to exclude without examination the possibility that Herodotus' intention cannot be understood without a complete revision of our "categories." Collingwood did not merely fail duly to appreciate the fact that the historian must provisionally subordinate his own question to the questions which the authors of his sources meant to answer. He likewise failed to consider the possibility that the historian may eventually have to retract his own question in favor of the questions raised by the authors of his sources.

Yet while the critical function of the historian may not become noticeable most of the time, or ever, the historian is, nevertheless, necessarily a critic. He selects a theme which he believes to be worthwhile: the critical judgment that the theme is worthwhile precedes the interpretation. He provisionally subordinates his question to the question guiding his author: eventually the historian's own question re-asserts itself. Nor is the interpretation proper - the activity which follows the reasoned selection of the theme and which is coextensive with the subordination of the historian's question to the question guiding his author - separable from criticism. As Collingwood put it, it is a "self-contradictory task of discovering (for example) 'What Plato thought' without inquiring 'Whether it is true' " (300). One cannot understand a chain of reasoning without "re-enacting" it, and this means without examining whether or not it is valid. One cannot understand premises without understanding them as premises, i.e., without raising the question whether they are evident or intrinsically necessary. For if they are not evident, one must look for the supporting reasoning. The supporting reasoning, a crucial part of the teaching of the author as the author understood it, might easily pass unnoticed if one failed to look for it, and one is not likely to look for it unless one is prompted to do so by a realization of the inevident character of the premises concerned. Therefore the establishment of the fact (if it is a fact) that an author makes a dogmatic assumption may be said to be inseparable from the interpretation of the author in question.

But the fact that the historian is necessarily a critic does not mean, of course, that his criticism necessarily culminates in partial or total rejection; it may very well culminate in total acceptance of the criticized view. Still less does it mean that the historian necessarily criticizes the thought of the past from the point of view of present day thought. By the very fact that he seriously attempts to understand the thought of the past, he leaves the present. He embarks on a journey whose end is hidden from him. He is not likely to return to the shores of his time as exactly the same man who departed from them. His criticism may very well amount to a criticism of present day thought from the point of view of the thought of the past.

The fact that interpretation and criticism are in one sense inseparable does not mean that they are identical. The meaning of the question "What did Plato think?" is different from the meaning of the question "Whether that thought is true." The former question must ultimately be answered by a reference to texts. The latter question cannot possibly be settled by reference to texts. Every criticism of a Platonic contention implies a distinction between the Platonic contention, which must be understood as such, and the criticism of that contention. But interpretation and criticism are not only distinguishable from each other. To a certain extent they are even separable from each other. Plato's thought claims to be an imitation of the whole; as such it is itself a whole which is distinguished from the whole simply. It is impossible to understand the imitation without looking at the original. But it is possible to look at the original in compliance, or without compliance, with the directives supplied by the imitation. To look at the original in compliance with the directives supplied by the imitation means to try to understand the whole as Plato understood it. To understand the whole as Plato understood it is the goal of the interpretation of Plato's work. This goal is the standard which we presuppose, and to which we ultimately refer, whenever we find someone's interpretation of Platonic doctrine defective: we cannot find an interpretation defective without having "seen" that goal. The attempt to understand Plato's thought as Plato understood it is inseparable from criticism, but that criticism is in the service of the striven-for understanding of Plato's thought. History as history, as quest for the understanding of the past, necessarily presupposes that our understanding of the past is incomplete. The criticism which is inseparable from interpretation is fundamentally dif-

ferent from the criticism which would coincide with the completed understanding. If we call "interpretation" that understanding or criticism which remains within the limits of Plato's own directives, and if we call "criticism" that understanding or criticism which disregards Plato's directives, we may say that interpretation necessarily precedes criticism because the quest for understanding necessarily precedes completed understanding and therewith the judgment which coincides with the completed understanding. The historian who has no illusions about the difference of rank between himself and Plato will be very skeptical in regard to the possibility of his ever reaching adequate understanding of Plato's thought. But what is impossible for most men is not therefore intrinsically impossible. If one denies the legitimacy of the goal which we called adequate understanding of Plato's thought, i.e., if one denies the possibility of historical objectivity, one merely substitutes a spurious right of subjectivity and of arbitrary assertions for the honest confession that we are ignorant of the most important facts of the human past.

It is then indeed a "self-contradictory task of discovering 'What Plato thought' without inquiring 'Whether it is true'.' It is indeed impossible to understand a line of Plato if one is not concerned with what Plato was concerned with, i.e., the truth about the highest things, and hence if one does not inquire whether what Plato thought about them is true. It is indeed impossible to understand what Plato thought without thinking, i.e., without articulating the subjects about which Plato thought. Thinking about Plato's subjects cannot be limited by what Plato said or thought. It must take into consideration everything relevant, regardless of whether Plato seems to have considered it or not. That is to say, trying to understand Plato requires remaining loyal to Plato's quiding intention; and remaining loyal to Plato's intention means to forget about Plato and to be concerned exclusively with the highest things. But Collingwood assumed that we must not forget about Plato in spite, or rather because, of the fact that we must aim at no other end than the truth regarding the highest things. This assumption is legitimate and is not defeated by its consequences, if it means that we may have to learn something

from Plato about the highest things which we are not likely to learn without his guidance, i.e., that we must regard Plato as a possible authority. But to regard Plato as a possible authority means to regard him for the time being as an actual authority. We must, indeed, ourselves articulate the subjects about which Plato thought, but in doing this we must follow Plato's indications as to the manner in which these subjects should be articulated. If Plato took something for granted which we are in the habit of doubting or even of denying, or if he did not push the analysis of a given subject beyond a certain point, we must regard it as possible that he had good reasons for stopping where he stopped. If it is necessary to understand Plato's thought, it is necessary to understand it as Plato himself understood it, and therefore it is necessary to stop where he stopped and to look around: perhaps we shall gradually understand his reasons for stopping. As long as we have not understood Plato's thought, we are in no position to say "Whether it is true." The "historian of philosophy" is a man who knows that he has not yet understood Plato's thought and who is seriously concerned with understanding Plato's thought because he suspects that he may have to learn from Plato something of utmost importance. It is for this reason that Plato's thought cannot become an object, or a spectacle, for the historian. It is to be feared that Collingwood underestimated the difficulty of finding out "What Plato meant by his statements" or "Whether what he thought is true."

History, i.e., concern with the thought of the past as thought of the past, takes on philosophic significance if there are good reasons for believing that we can learn something of utmost importance from the thought of the past which we cannot learn from our contemporaries. History takes on philosophic significance for men living in an age of intellectual decline. Studying the thinkers of the past becomes essential for men living in an age of intellectual decline because it is the only practicable way in which they can recover a proper understanding of the fundamental problems. Given such conditions, history has the further task of explaining why the proper understanding of the fundamental problems has become lost in

such a manner that the loss presents itself at the outset as a progress. If it is true that loss of understanding of the fundamental problems culminates in the historicization of philosophy or in historicism, the second function of history consists in making intelligible the modern notion of "History" through the understanding of its genesis. Historicism sanctions the loss, or the oblivion, of the natural horizon of human thought by denying the permanence of the fundamental problems. It is the existence of that natural horizon which makes possible "objectivity" and therefore in particular "historical objectivity."

LEO STRAUSS

The University of Chicago.

HISTORICAL PERSPECTIVES ON AMERICAN PHILOSOPHY

I

The most obvious fact about American philosophy as a subject-matter is that no one is quite sure what it is. Heir to the history of philosophy and the creature of the college curriculum, suspected by philosophers but admired by administrators, it seems to be in the curious position of an adolescent king, neither loved nor respected but accepted as a fact. One of the reasons for this grudging acceptance of the history of American thought is perhaps the suspect legitimacy of its sire. The history of philosophy was created and nurtured in an intellectual environment which has been, especially in this country, for the most part repudiated; it was conceived in the mind of Hegel, for whom the history of philosophy was philosophy itself, and the historian its product and prophet. But now that the view is widely held that contemporary and sophisticated philosophy cancels and rejects, rather than cancels and preserves its tradition, the philosophical reason for the study of the history of philosophy as a complex but single developmental pattern has been superseded, while yet the habit of so treating it remains. A second reason for the pervasive suspicion of the history of American thought is clearly a sense of the inferior value of American philosophy itself when compared with the sources of the Western tradition in which it was a late emergent. But the second reason depends on the first: either the traditional formulation of philosophical problems is taken to be definitive, in which case American thought is a minor variation on a theme, or else the classic tradition is rejected in the light of contemporary sophistication, in which case the American contribution is no less but no more significant than the classic tradition which shaped it.

Evidently an estimate of the history of American thought is in large part consequent on an interpretation of the value of the history of philosophy in its own right. This is complicated, however, by the fact that the history of philosophy itself has been treated in at least three (not necessarily incompatible) ways. In each of these it is a record of doctrines, opinions, or

views; but it must of course be more than a merely chronological account of verbal formulations. Interpretation is necessary even where not admitted, and interpretation has as a consequence principles of selection and organization. It is in terms of these that three competing views can be distinguished.

There is, first of all, the "history of problems," which at least makes possible a clear and relatively unambiguous principle of canonization: a philosopher is one who has explicitly recognized and dealt with at least one of the issues now or recently recognized as philosophical problems. Descartes, for instance, and Cartesianism in general are major events for any history of modern thought. But the historian of currents moves on at once to Locke or to Spinoza and Leibniz: the historian of eddies tarries awhile with Malebranche; and the historian of backwashes conducts a careful analysis of Geulincx. The canon of Western philosophy has achieved in this respect a consensus which makes possible a neat division of labor and a working curricular distinction between elementary, intermediate and advanced history. In American philosophy, however, no similar canon has been well established, and the historian is confronted with the necessity of deciding for himself the scope as well as the limits of his inquiry.

A second way of approaching the history of philosophy has been as intellectual history in general, taking philosophy not as a history of problems or of systems but as Weltanschauung. Here not problems but presuppositions, not systems but unexamined assumptions are the focus of interest. Science. religion, art, literature, and the dynamics of social and political change, as well as "philosophy," become the media through which ideas are revealed to historical perspective; the philosopher becomes a representative of culture, whose interests and problems are stated perhaps more abstractly and systematically but do not differ in purpose or significance from those of the poet, the scientist, or the politician. Nature, man, and God are the themes of which world-views are composed, and the Newtonian world-machine explains the philosophy of the eighteenth century, as, on the other hand, Whitehead explains the science of the twentieth; and Dali conceives an art form in which "nothing touches." Our most brilliant example of this mode of historiography is of course Lovejoy's The Great Chain of Being. But apparently a judicious understanding of the presuppositions of thought is possible only with the advantage of historical distance. Again, the history of American philosophy is at the disadvantage of being too near our contemporary interests to permit the analysis of presuppositions which may very well be our own. Our fathers heard Emerson lecture; and a history of American thought limited to Calvinism and the American enlightenment would be inconclusive indeed.

A third approach to the history of philosophy has been seldom defended or demonstrated, although it is perhaps the dream of every historian and the unexamined thesis of every history, and that is to treat the history of ideas as a subjectmatter in its own right as a way, and perhaps the best way, of engaging in philosophical inquiry. In this perspective, it is not, as it was for Aristotle, the examination of what has been said to see what can still be said; nor is it, as it is, say, for Dewey, an examination of what has been believed, to see why it ought not be believed now; rather is it the examination of what has been said and believed in order to understand what is being said and believed now. In this sense it is something which today is always discussed but never mentioned: the philosophy of philosophy, a method of inquiry conducted on the assumption that philosophy is unique in having itself as part of its own subject-matter, that every statement about the history of philosophy is itself part of the history of philosophy. This differs from the second, or "cultural" interpretation of philosophy in recognizing that the concept of culture is itself a philosophical idea, which is to say that it is not a magic source of insight but itself a problem. From the standpoint of the philosophy of philosophy. American thought is a minor illustration of ubiquitous principles, distinguished by geographical and historical accidents, but nevertheless making its own unique contribution to understanding.

II

Recent additions to the small shelf of histories of American philosophy illustrate each of these tendencies and emphasize the collective uncertainty about the purpose of the whole enterprise. Within the last two years the number of general histories has been almost doubled by the appearance of W. H. Werk-

meister's A History of Philosophical Ideas in America 1 and Frederick Mayer's A History of American Thought 2 (both intended as college textbooks), and the reappearance, in a revised edition, of Gustav Mueller's Amerikanische Philosophie.³

Of these three, Mueller's history most nearly approximates the third interpretation of history, and is, in fact, the only one which seeks to do so. It is written with judicious scholarship for a German audience of some philosophical sophistication, and although Professor Mueller had been teaching in this country for more than a decade when the first edition appeared. it betrays a characteristically German conception of philosophy at some points. For one thing, it is the only history of American philosophy to take seriously the existence of aesthetics as a philosophical discipline. As a result it is the only history which as much as mentions Poe ("the Ernst Theodor Amadeus Hoffman of American romanticism") and the only one to give some account of the literary criticism and interpretation of the St. Louis Hegelians (using as an illustration the eccentric Brokmever's essay on Goethe's Faust) - an important point, since one would hardly learn elsewhere that Harris's Journal of Speculative Philosophy carried substantial interpretations of art and music. Mueller, moreover, emphasizes the not inconsiderable influence of German thought on American philosophy (at the expense of minimizing, for instance, the French influence on Jefferson), and a chapter on "Hegel in America," newly added to the second edition, is the most substantial discussion of this subject since Muirhead.

This is, in fact, a Hegelian history, and for this reason suggests the conception of history of philosophy as philosophy of philosophy. This is clearest in the final chapter, which is really an independent essay recapitulating in summary form the outline of the history as an illustration of the thesis that "Philosophy is the spirit of every culture" and of the analysis of American philosophy into four (not three!) stages: puritanism, enlightened humanism, romantic idealism, and pragmat-

¹ New York: The Ronald Press Company, 1949. 599 pp. \$5.00.

² Dubuque, Iowa: Wm. C. Brown Company, 1951. 399 pp. \$4.00.

³ Stuttgart: Fr. Frommanns Verlag, 1950. 336 pp.

ic activism.⁴ There is nothing very startling about this division, except for the fact that Mueller interprets it in the end as demonstrating the truth of the doctrine of the dialectical unity of opposites, with, however, the vitiating admission that "the Weltgeist does not operate continuously in one direction alone." That the history itself can be read without reference to this interpretation seems evidence that the method of the Geistes-wissenschaften is still an arbitrary philosophy of philosophy.

At an extreme of interpretation is Werkmeister's A History of Philosophical Ideas in America, which must be classified as a history of problems although it is as close to a history of beliefs as it is possible to come without becoming an anthology. Werkmeister's history is notable in two respects, in which it differs from all other histories. First of all, it treats American philosophy as beginning with the end of the Civil War. Puritan philosophy, Jonathan Edwards, the American enlightenment, transcendentalism, and even St. Louis Hegelianism apart from William Torrey Harris, belong to the "cultural background of American philosophy," and are disposed of in sixtythree pages, less than half the space devoted to new realism and critical realism alone. The reason is explicitly stated: in comparison with "modern and technical philosophy in the United States" all that went before is "puerile, haphazard and incomplete." because lacking in that "balance and incisiveness which modern science has contributed to the philosophical temper of our own time" (pp. 4 f.). Presumably this would dispose as well of all Western philosophy before the advent of "balance and incisiveness," and vitiate as well the opinions of the modern and technical philosophers who have not shared this opinion. This limitation, however, makes it possible for Werkmeister to treat much more fully than any other general history the "new philosophy." The manner of treatment itself is a second notable feature. The author has avoided consistently and almost completely critical analysis and interpretation of his

⁴ The substance of this chapter is contained in Mueller's chapter, "American Philosophy," in *Twentieth Century America*: A Survey of Civilization (New York: Philosophical Library, 1948); and it was also communicated to philosophers south of the border in an essay tactfully entitled "North-American Philosophy," in *Actas del Primer Congreso Nacional de Filosofia* (Mendoza, Argentina: Universidad Nacional de Cuyo, 1949) I, 456-79.

own by following the most obvious principles of organization. Unlike Schneider's History of American Philosophy, whose theme is ideas (one result of which is that major figures are discussed in bits and patches throughout the book without any sort of integral exposition [e.g., see the Index for Emerson, or Peirce, or Dewey]). Werkmeister's history is organized by men, with the result that we get all of James in one section, and all of Dewey in another, with no discussion of the history of pragmatism as such. For each person discussed, organization is by chronology of publication (e.g., Whitehead), or by an order of topics adopted by the person concerned (e.g., Santayana, whose Life of Reason is discussed in the order of the five volumes [none of Santayana's other books is discussed or mentioned]), or by the philosophical classification of metaphysics, epistemology, logic, etc. (e.g., Peirce). Standing out sharply from the summaries of doctrines of individual figures are the chapters on neo-realism and critical realism, which together constitute a fourth of the book. This section is, as the rest of the book is not, an examination of the history of ideas as transformed by technical criticism within an intellectual group, and it is the most detailed history of these movements in the United States yet written. In this section, too, Werkmeister's device of introducing critical analysis only by quoting contemporary criticism is effectively employed; in the rest of the book it is used only in rare cases, with the consequence that the life and movement of ideas is wanting.

The result is a book which is not quite a history and not quite a source book. The greater part of the book consists of quotations and paraphrases, which give neither the flavor nor the substance of a man's thought but succeed in compressing his most important ideas in a small space with unimpeachable accuracy. It is essentially a *Handbuch*. The gesture toward placing philosophy in a "cultural setting" is abortive and consists only of the early pages on pre-Civil War "philosophy" and a few pages on the Gospel of Wealth.

If a cultural setting is what is wanted, Mayer's A History of American Thought might seem to be just the thing. It gives more space to Walt Whitman than Werkmeister does to Emerson, and more to Wendell Willkie than Werkmeister does to Jonathan Edwards; and it is the first history of American philosophy to mention Rudolph Valentino and the Dempsey-

Tunney fight. Where Werkmeister devotes a fourth of his book to the development of neo-realism and critical realism, Mayer devotes to it, apart from listing names and chapter titles in the two cooperative studies, exactly two sentences. But the book is still oriented toward philosophy. Mayer believes that philosophy should be introduced into the high school curriculum (p. 377), and a cynic might observe that this book seems written for high school students. (There are even questions on each chapter; for example: "Enumerate Bowne's main works." "What, according to the author, should be the function of philosophy in American life?") It is, even for them, a poor book. Attempting to be both encyclopedic and inspiring, it succeeds in being neither. It is replete with names, dates and titles of books. The names are sometimes misspelled (pp. 360, 368), often with first name or even initials omitted (pp. 199. 271, 294). Dates are given haphazardly: we are given complete dates for A. T. Bledsoe, the subject of a short paragraph, but not for Samuel Johnson, the subject of a chapter. There are more titles in this book than in any other history except Schneider's, with its incomparable bibliography, but no reference, in the chapter on Peirce or elsewhere, to the Collected Papers. There are numerous small mistakes of fact: the modest defendant in the Scopes trial is promoted to professor: Bertrand Russell's imbroglio with social morality is located at New York University instead of the City College of New York. There are other statements which are misleading if not false: Dewey seems to become a logical empiricist on p. 362; on p. 248 Peirce is said to have been influenced by the Scottish common-sense school to become a realist in epistemology (there is no explanation here or in the discussion of Scottish common-sense philosophy of what "realism" in any of its senses means); and Henry Adams is "to some extent . . . the most liberal of all American thinkers" (p. 169).

But these are details which in any case are not likely to be assimilated or remembered by the student using this book. Its significance lies rather in its attempt to present philosophy as a phase of culture, and in its failure to do so. It emphasizes the obvious, like the connection of transcendentalists with the abolition movement, but for the most part remains an elementary summary of political and social history alternating with references to the history of philosophy, in which an attempt is seldom

made to explain or clarify often difficult and technically expressed views. The juxtaposition of the familiar (the depression and the New Deal) and the unfamiliar (Santayana's view of immortality as reason vanquishing time) is likely to suggest to the reader only the utter failure of philosophy to accomplish what it never attempts.

Ш

The history of philosophy as the history of culture and the history of philosophy as the history of the search for truth are not always compatible. Representatives of culture may often be uninspired, pedestrian, even infuriating in their petty respectability, while the searching and subtle intellects may draw inspiration from the well-springs of human experience uncontaminated by "culture." Fortunately, however, Western thought has on the whole made possible a combination of representativeness and greatness without the necessity of belaboring the obvious; the great minds have been also influential. But the historian of American philosophy discovers a notable and disturbing exception in his own subject, which, with the somewhat trivial exception of the American Enlightenment, never passed through the period of philosophy as a branch of humane letters which made Locke, for example, the intellectual acquaintance of every educated man. This, together with the absence of a canon, makes the history of American thought still a rich mine for the connoisseur of the keen and powerful intellect who was isolated from intellectual associations, if not from the intellectual currents of his time. One of the most fascinating chapters in this history, which is still being written, is the story of the rara avis, the philosophical isolate, the intellectual rebel, pursuing a steady course without companionship or recognition. Alexander Bryan Johnson has only recently received recognition, a century late. There is still no major study of the Aristotelian, Thomas Davidson, whom William James delightedly quoted as boasting, "God is afraid of me!" And the Cincinnati lawyer, Johann Bernhard Stallo. who was one of our most acute philosophers of science — an American Mach - is dismissed with a few lines in the histories. But two of our most productive isolates have recently received serious and even definitive studies: the elder Henry James and Edmund Montgomery, the "cowboy philosopher from Six Shooter Junction."

The companion volumes which make available for the first time the life and a systematic study of the latter have also written a new chapter in the history of American thought. No history of American philosophy to date has even mentioned Montgomery, with the exception of Schneider's history, which bases its discussion mainly on articles by the authors of the current volumes. The Hermit Philosopher of Liendo,5 by I. K. Stephens, and The Philosophy of Edmund Montgomery,6 by Morris T. Keeton, are definitive treatments of Montgomery's biography and systematic philosophy. The story of the illegitimate Scot, reared and educated (in medicine) in Germany. who spent the greater part of his life in virtual isolation (but not as a "cowboy") in Texas, is by all odds the most fascinating biography of an American philosopher yet to appear (although there have been three biographies of his wife, the scluptress Elisabet Nev).

Historians of "influence" are not likely to revise their estimate (or rather their ignorance) of Montgomery; he was as little influential as anyone can be whose bibliography of books and articles takes up more than four pages. But Keeton's study demonstrates with compelling cogency both the extraordinary degree to which Montgomery anticipated contemporary problems and the thesis that Montgomery was one of the first thinkers to construct a tight philosophical system adequate to discoveries in biology and sensitive to philosophical problems (in this respect Keeton claims less than he actually proves). Essentially, Montgomery's "philosophy of vital organization" was a distinctive theory of emergence which interpreted life as a unique product of physico-chemical forces, and afforded a new approach to traditional problems of knowledge and value-theory by its view of man as an organism in what Dewey was much later to call "transactions" with a natural environment. Montgomery was a physiologist who recognized the necessity of a theory of the concept, an experimental scientist who was aware of the necessity of epistemological criticism of the presuppositions of science, a naturalist who avoided the

⁵ Dallas, Texas: Southern Methodist University Press, 1951. 402 pp. \$5.00.

⁶ Dallas, Texas: University Press in Dallas, 1950. 386 pp. \$5.00.

nineteenth century non sequitur of defining value in terms of evolutionary "progress." He was sufficiently skilled as a scientist to discover by experimental investigation flaws in current cytological theory and sufficiently acute as a philosopher to understand the significance of Kant's doctrine of schematism (which was, in fact, overlooked by most professional post-Kantians). With respect to his anticipation of contemporary problems, Keeton makes lucid analyses of current views which are valuable in themselves, and his discussion of nineteenth century scientific theories and interpretations of scientific results is itself a liberal education in the history of science.

There is no evidence that there was any contact at all between Montgomery and the elder Henry James - whose productive years almost exactly coincided - which is not surprising in view of the remarkable contrast between the two men. Montgomery, isolated in Liendo, belonged nevertheless to an intellectual community which embraced the United States. England and Germany, and was actively aware of current discussions in the philosophical journals. James, centrally located in New York, free of financial worries, the intimate of the Transcendentalists, remained remarkably independent of any sort of intellectual community. Montgomery, a scientist, constructed one of the most solid naturalisms before our century; lames, by taste and talent a theologian with little respect for theology, developed one of the most thoroughgoing spiritualisms of any American century. James has not been as thoroughly neglected as Montgomery (Austin Warren's book has already outlined his life and thought), but Frederic Harold Young's study, The Philosophy of Henry James, Sr. is the first systematic analysis of this intellectual rebel. It is a difficult task, and a difficult book. The elder James took no interest in the history of philosophy nor did he belong to any well-defined intellectual tradition except the one of which he was the only representative. Young is forced, therefore, to explain the sources of his unique synthesis by reference to the most esoteric by-ways of intellectual history. Sandemanianism. Swedenborgianism, Fourierism and a sort of neo-Neoplatonism, all superimposed on a heterodox Calvinism, were the landmarks of James's spacious and lonely mind. For James, as for the Transcendentalists, philosophy was vision, revelation, a spirit-

⁷ New York: Bookman Associates, 1951. 338 pp. \$4.50.

ual rather than an intellectual activity; and his books and articles did not serve the development but the clarification and reformulation of a system grasped all at once. They were not, as in the case of Montgomery, the products of an inquiry but the records of a vision. Nonetheless, this was a vision with order and a dialectical structure, architectonic rather than fragmentary.

The difference between Keeton's study of Montgomery and Young's of the elder James is as striking as the difference between the two men themselves, and suggests that there is no "right" way to understand the history of ideas, since each is in its own way successful. Keeton writes from the standpoint of contemporary philosophical interests, from the outside, as it were, while Young sketches - from the inside - the topography of a mind. The difference is a natural and intelligible one, but conceals a significant similarity. The success of each study depends not on a sort of intellectual surveying, pinpointing each figure on the latitude and longitude of ideas, but rather in a display of the systematic connection of ideas with reference to an individual purpose and a distinctive method. Montgomery's purpose was the solution of traditional philosophical problems, and his method was the interpretation of scientific discoveries; James's purpose was personal salvation, and his method a dialectic of opposites accounting for both man's distance from and nearness to God.

A comparison of the two studies raises the perennial question of the purpose and method of philosophy as such. The history of American thought has yet to be written which does justice to both knowledge and wisdom, both experiment and vision; and in all probability this is due to the fact that the history of problems and the history of culture have not yet attained the synthetic view of the philosophy of philosophy.

IV

But there is much to learn. Perry Miller's recent anthology of *The Transcendentalists* ⁸ is a valuable lesson to philosophers in how to understand the history of ideas, despite the editor's modest claim that he has allowed the transcendentalists to

⁸ Cambridge, Mass.: Harvard University Press, 1950, 521 pp. \$6.50.

speak for themselves. The fact is that by judicious organization, bold editing (with the fat trimmed away, transcendentalist prose emerges for the first time as clean and muscular), and perceptive introductions to each selection, Miller has made the movement come alive and has explained what before was merely a puzzling fact — the energy and dedication of the transcendentalists to an idea which in the perspective of a century has often seemed a confused and quixotic rebellion of which Emerson's "a foolish consistency is the hobgoblin of little minds" and Margaret Fuller's reported "I accept the universe" are equally epiphanies.

Miller has collected the theoreticians — e.g., George Ripley and Theodore Parker — as well as the minor eccentrics — e.g., Christopher Pearse Cranch and Jones Very — and also the intelligent and bitter critics of the movement — e.g., Andrews Norton and Francis Bowen — and at the small price of neglecting Emerson and Thoreau has woven the account of minor skirmishes into the picture of a major intellectual battle. The philosophical interest in this narrative is due to the fact that, as Miller clearly shows, the central issue in the

controversy was the empiricism of Locke.

Histories of American philosophy tend to under-rate the fact that until the middle of the nineteenth century the longest shadow in American thought was cast by Locke (and the Locke of the Essay, rather than the Locke of the Treatises on Government). The selections in The Transcendentalists clearly demonstrate that the members of this group knew quite well who their adversary was - the "sensational philosophy" which had brought New England Unitarianism to the point of insisting on miracles as the only evidence for Christianity acceptable to the senses. Better than the histories of philosophy, this anthology provides a rewarding insight into the way in which, at least in one instance, philosophy as a concern for fundamental issues is a pervasive force in "culture"; and this judgment is all the more compelling because it is apparently not the editor's leading thesis. More than this, it is shown in an almost week by week clash and transformation of ideas. The chapter "Annus Mirabilis" especially conveys a sense of the excitement of the last few months of 1836. In comparison with this history of ideas, the history of doctrines seems pale indeed.

Yale University.

Louis O. Mink



PRZYWARA'S PHILOSOPHY OF THE ANALOGIA ENTIS

The German Jesuit philosopher, Erich Przywara, has developed a particularly comprehensive interpretation of the analogia entis. His "analogy metaphysics" is often described as a new Thomistic existentialism, a name which he accepts only with major reservations. Przywara's works, in particular his Religionsphilosophie Katholischer Theologie, translated into English by A. C. Bouquet of Cambridge as Polarity, and his later Analogia Entis which has not been translated, are of major importance for the appraisal of the analogia entis in both philosophy and theology.1 Przywara formulated his interpretation of the analogia entis from his own intensive study of the philosophical tradition. He concluded that this idea, reinterpreted as living tradition, has singular importance for contemporary philosophical discussion. In his reinterpretation, Przywara treats the idea of analogy more broadly than the tradition of analogy doctrine established by Cajetan and John of St. Thomas. He is able to give it a singular richness of meaning because he views it from many different perspectives and in a wide variety of relationships. In the end, Przywara's "existentialism" represents a complex synthesis of many different types of philosophical ideas which are not generally associated together. This synthesis is possible because of the singularly comprehensive and unifying role which he assigns to the analogia entis.

Przywara lived in the Jesuit community in Munich until the close of the second world war. He belonged to the group of Southern German Catholic scholars of widely ranging philosophical and theological interests, which included Karl Adam, Martin Grabmann and Guardini among others. Contributing frequently to the magazine of his order, Stimmen der Zeit, he was the leading German Jesuit philosopher of religion in

¹ Religionsphilosophie Katholischer Theologie. Oldenbourg, Munich, 1927. Translated by A. C. Bouquet as Polarity, Oxford University Press, London, 1935. Analogia Entis, Kösel und Pustet, Munich, 1932.

the period between the two world wars. Przywara attracted special attention because he welcomed, more than most of his Catholic colleagues, discussions with all schools of German philosophy, Kantian, Hegelian idealist and modern existentialist, as well as with Protestant dialectical theologians. His own position was always defended with wide historical knowledge and philosophical understanding. There is more frequent reference in most of the periodicals and books of the period to Przywara's argument in some particular discussion or controversy than to his own systematic exposition and philosophy. His philosophical interests were stimulated by his personal friendship with Martin Heidegger which dates from their early association together as pupils at a Jesuit school in Austria. Przywara, probably more than any other Catholic thinker. has not only been attracted to but really shared in the new speculation and positive insights of existential philosophy.

Przywara's exposition of the analogia entis, indeed his entire interpretation of theism, is of special importance for contemporary philosophy because it is based on a new appraisal of the role of analogy in philosophy and theology. Przywara was always intensely loyal to the Catholic tradition in thought and life. However, because his own motivation and interests were genuinely philosophical as well as religious, he found himself led increasingly to new evaluations as well as critical reformulation. In the best tradition of Jesuit scholarship, he carried on an intensive program of study in Munich for ten or eleven months each year. His keen speculative interests gave him an unusual appreciation of the many-sidedness and diversity of the philosophical tradition. The remainder of his time was given to university and public lectures which were the occasion for criticism and debate. His discussions with non-Catholic philosophers as well as Protestant dialectical theologians on his lecture tours contributed significantly to his own philosophy of the analogia entis. Przywara insisted repeatedly in debate that the analogia entis is presupposed by all types of Catholic philosophy and is not limited to any one school of Catholic thought.2 He developed his "analogia entis metaphysics" as his own synthesis of classical, scholastic and

² This is the basic thesis of his Religionsphilosophie Katholischer Theologie.

modern philosophical ideas in the spirit of Aquinas. One might expect that his friends would find such an interpretation both suggestive and rich in meaning and his opponents regard it as subtle in argument but singularly eclectic in character.

Przywara's particular synthesis is possible because he conceives of the analogia entis as a principle of unity in philosophy. He argues that the analogia entis is of determinative importance not only as the epistemological basis of the Thomistic natural theology, but as the fundamental principle for our understanding of being in all its relationships. A comprehensive exposition of the analogia entis must examine its implications for cosmology and ontology as well as epistemology. By assigning to analogia entis the widest possible scope, Przywara makes it the basis for an interpretation of the nature and meaning of philosophy.3 He believes that the analogia entis makes it possible to unify many different ideas and diverse motifs in the philosophical tradition. Analogy is a singularly rich and inclusive principle of breadth which enables us to relate diverse types of reality in experience; it is also a principle of knowledge in depth which makes clear the inner meanings and relations in being. The recognition of the analogy relations in being makes it possible to inquire whether there is a common pattern of meaning and direction in the totality of human knowledge and life. Our apprehension of a total pattern of meaning would be necessarily analogical in character, inasmuch as it would include a wide variety of types of reality. Przywara argues that the analogia entis gives us a knowledge of the essential relations in being of the diversity of reality and enables us to relate different individuals and types of existence from our knowledge of their commonness in being. An analogy metaphysics enables us to apprehend a significant unity in plurality in existence. This is the case because the analogia entis, as the principle of philosophical knowledge, makes it possible for us to apprehend the diversity of reality

³ "Analogia entis as actual principle of a metaphysics in general illuminates itself from the way in which the basic consideration concerning a formal principle of metaphysics in general as well as the historical analysis of the basic tradition in its formal principle unite themselves into the picture of the analogia entis..." Analogia Entis, 149.

not simply in its immediate appearance or distinctive particularity, but in its fundamental relationships in being.

The epistemological basis of Przywara's interpretation of the analogia entis, in particular his critical analysis of the possibility of knowledge, derives in large measure from the phenomenological philosophy of Edmund Husserl and the existentialism of Martin Heidegger.4 Przywara regards the scholastic type of realism, mediated by Brentano to Husserl and Heidegger and reflected as well in the works of Max Scheler, as fundamental to the metaphysics of the analogia entis. Following Brentano, Husserl insisted that no intellectual knowledge is possible apart from a real object of knowledge in being. Moreover, he argued that the object of knowledge must not be conceived in narrowly sensory terms; Husserl offered an extensive "phenomenology" to show that there are many and varied intellectual objects of knowledge.5. His description of "phenomena" was almost the exact reverse of the Kantian interpretation in intention and scope. Husserl believed that his own analysis demonstrated conclusively the ontological givenness in their particularity of a wide variety of objects of knowledge; in itself it was a refutation of the Kantian distinction between "phenomena" and "noumena." 6 Przywara accepted Husserl's phenomenological analysis as conclusive proof that human knowledge has its first basis in and is directed to a comprehension of being in its richness and depth. Husserl's comprehensive epistemological realism contributes significantly to Przywara's interpretation of the fundamental character of knowledge in experience. However, Przywara rejects Husserl's attempt, particularly in Husserl's later works, to distinguish pure intellectual objects of knowledge from any existential givenness in the world of concrete particularities and insists with Heidegger on the temporal, existential givenness of all knowledge in its particularity.

⁴ Cf. Przywara's "Drei Richtungen der Phänomenologie," Stimmen der Zeit, CXV, 252-264.

⁵ Edmund Husserl, Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie, Max Niemeyer, Halle, 1913.

⁶ Cf. E. Parl Welch, The Philosophy of Edmund Husserl, Columbia University Press, New York, 1941, p. 229.

Heidegger argues against Husserl that all of our knowledge of being in the world is time-bound and finite.7 We may know being only from its temporal manifestations in the world of change and becoming. Heidegger's "fundamental ontology" is intended to show the essential limits and "this-worldly" character of all human knowledge.8 His dominating concern for existence leads him to a new realism in philosophy; however, the Kantian distinction between "phenomena" and "noumena" remains implicit at least in measure in his analysis. Przywara accepts Heidegger's thesis that all our knowledge of being is essentially time-bound. He believes that Heidegger's interpretation approaches Aristotelian realism more closely than the fundamentally Platonic idea of timeless essences dominant in Husserl's later works. However, Przywara's own philosophy is dependent for its fundamental insights on the analysis of both Husserl and Heidegger. He urges with Husserl that real essential knowledge is given in existence. Nonetheless, he holds that this essential knowledge always has a temporal, historical reference, as Heidegger insists. Our knowledge is always a knowledge of essence-in-existence in the world.

Przywara makes his doctrine of the real givenness of essence in existence the ontological basis for the refutation of Heidegger's doctrine of "Nothingness." He insists that the actual givenness of essence in existence implies a positive potentiality and determination in the ground of being. Przywara allows with Heidegger that being is not self-complete or its own ground of being "in the world." He welcomes Heidegger's interpretation of metaphysics as essentially an inquiry about the ground and determination of being and not merely about appearance or being as "at hand." Metaphysics, he agrees, is directed to an understanding of being in its richness and depth. However, Przywara disagrees with Heidegger's interpretation of the total directedness of being and denies that it has its fundamental determination from a basic "Nothingness." He argues, on the

⁷ A detailed comparison of the philosophies of Husserl and Heidegger, in the points most relevant to our study, is found in Franz Muth's Edmund Husserl und Martin Heidegger in ihrer Phänomenologie und Weltanschauung, Schwäbische Verlags-Aktiengesellchaft, Temeswar, 1931.

⁸ This is the fundamental intention of his Sein und Zeit.

⁹ Analogia Entis, 67, 69, 83-94.

contrary, that our knowledge of the positive givenness of being in experience points analogously to the fullness of being; our relation to the ground of being is a positive, transcending one. The givenness of being in the world is not explicable from the negative potentiality of "Nothingness." Przywara's major thesis in defense of the analogia entis is that being in its relationships in the world is ultimately inexplicable apart from a positive, transcending relation to being as such. He argues that Aristotle has shown conclusively that a more positive potentiality underlies all manifestations of being in the world: Being opens "over-out." Przywara believes that a comprehensive phenomenology of being such as that of Husserl sustains a positive analogy of being.

Przywara emphasizes that the analogia entis signifies essentially that our experience of being in the world is directed "beyond itself." Interpreted broadly, it is implicit as a first premise in all the major classic and scholastic systems of philosophy. (Przywara's phrases "in-over," "over-out" and "beyond itself" all signify a positive analogous relation in being, that being is not self-contained in the world.10) As a fundamental ontological principle, the analogia entis implies that our knowledge of reality has its basis in a mean relation between being and becoming. It is not a knowledge of a static unity of being of the type envisaged by Parmenides; neither is it a knowledge of a restless becomingness as described by Heraclitus.¹¹ Rather, our knowledge derives from an analogy relationship of tension between being and becoming. The relationship between being and becoming is not one of complete identity or of complete difference, but rather of likeness in difference, hence of analogy. Przywara believes that the initial determination of philosophy in the classical tradition has its basis in the analogia entis, inasmuch as it presupposes a mean relation between being and becoming. Analogy is an appropriate vehicle for the description of the likeness and difference

^{10 &}quot;It is further involved in this analogy of being, that the creation, through its unity of form being a unity of tensions, is essentially 'open upwards'... Thus the ultimate unity of the creaturely is not within itself, but with That Which is above itself." Religionsphilosophie Katholischer Theologie, 24. This and following translations are by Bouquet.

¹¹ Analogia Entis, 76.

in being because being itself, as we apprehend it, is essentially analogical in character. The analogia entis is determinative for both the mode of knowledge and the mode of being. Przywara judges that the classical and scholastic traditions in philosophy presuppose a relationship of likeness in unlikeness (hence essentially of analogy) as fundamental to our apprehension of being. In our description of the relationships in being, we must reject both univocal and equivocal predication because being itself is essentially diverse even in its fundamental common character; we may not apply the same predicates in identical manner to all being. However, no significant description is possible in metaphysics if we deny the real commonness of the diverse manifestations of being; we may not ignore the real likeness implicit in the rich diversity of the world. Analogous predication alone allows for both likeness and unlikeness.

The analogia entis signifies not only an analogy tension between being and becoming, but that our total apprehension of being and becoming is directed "beyond itself." (Our knowledge of essence in the continuum of existence is never complete. but looks beyond itself to the fullness of reality.) There is a tension not only between being and becoming, but between the manifoldness of being and becoming in their entirety in the world and the full self-identity and unity of being. The acknowledgment of this tension in the analogia entis is fundamental to knowledge. Moreover, the plurality and becomingness of being in the world is directed to the fullness and unity of being as such; all finite goodness, truth and beauty are explicable only from the transcendent Good. True and Beautiful. Thus the analogia entis is descriptive not only of an analogy relationship (between being and becoming) in the world, but an analogy between the realm of this worldly existence in tension between being and becoming and the realm of Being as such in its fullness and purity. It is a positive principle which signifies the directedness of our being beyond itself in a transcending relationship.

Przywara's exposition of the analogia entis does not proceed exclusively from Platonic or Aristotelian premises.¹² He

¹² Analogia Entis, VI.

accepts the Aristotelian doctrine of causality, which is fundamental to Thomistic philosophy, but establishes the first premises of his own philosophy of analogy from a more comprehensive examination of the relations of being. Przywara believes that all philosophical interpretation must be justified from a "phenomenological examination" of the first bases of knowledge in the being of the human person. His analogy metaphysics has its initial basis in an "existential anthropology" or "fundamental ontology" of the type of Heidegger. He urges that the analogy character of all human knowledge and being is made clear from an examination of the capacities of man in his existence in the world. We must assay critically the possibility of a valid knowledge of being in critical reflection before proceeding to a comprehensive metaphysics and ontology. The success or failure of this analysis will determine whether it is possible to meet the destructive Kantian criticism of the first bases of metaphysical analogy.

Przywara argues that the analogia entis may be shown to be the formal principle of our knowledge from an analysis of the fundamental potentialities of the human person; these potentialities are determinative of the limits of our understanding (because the mode of our knowledge conforms to the mode of our being).13 The fundamental character of the human person may be described in an analogy formula: The essence of the human person is "in-over" existence (Sosein in-über Dasein). Przywara describes two basic tensions in man's being which conform to the analogia entis and show that essence is "in-over" existence in the human person. First, man as an actually existent being is not identical with his essence, but only tends continually to become identical thereto. This condition of man's being derives in part from a fundamental discontinuity between being as such and our particular mode of existence. The human person, according to this interpretation, is never in complete possession of itself in knowledge or being. Przywara intends his analysis as a precise philosophical description of the limited and dependent character of man's being: Man with his particular, limited essence is never in full possession of being in its full richness. In this sense, he has an

¹³ Religionsphilosophie Katholischer Theologie, 23, 24.

incomplete essence and requires something beyond himself in the nature of essence to complete his essence. The second basic tension of the being of the human person is made clear at this point in Przywara's analysis. Existentially, man's being never realizes fully its own mode of being; it is never identical with its own way of being. The tension between essence and the actual manner of our being is one which unfolds dynamically in existence according to our mode of being; the mode of being of the human person is realized increasingly but never fully in this dynamic process. This increasing realization of the finite essence requires a reference outside of essence which is existential in character. However, the essence is known and exhibited only partially in this dependent relationship in being; it is characterized by a "becomingness" and incompleteness. Przywara writes:

There remains then, in view of the undeniable character of "becomingness" in the creaturely, which excludes the idea of an identity between essence and existence (for this would involve the complete reality of essence and so its incapacity to "become" anything) — there remains then no other alternative than the completely open tension between essence and existence; essence as inward process essentially within existence and yet never as complete essence, essentially over or above existence; essence in-over existence.

In short, the relation between essence and existence in the human person is one of analogy (likeness and unlikeness in relation).¹⁴

Przywara believes that this "existential anthropology" makes clear the fundamentally analogous character of our being.¹⁵ The fundamental tensions in our life in the world are

¹⁴ Ihid

¹⁶ Przywara relates his description of the analogy tension of man's being to his epistemological analysis. An analogy tension or pattern of relationship exists not only in the fundamental nature of man's being as such but also in his ego in the very act of knowledge. Przywara finds that thought, emotion and will, the total consciousness, all have their final ground in an analogy tension of the consciousness between self-containedness (immanence) and a stretching-beyond-self (transcendence). He describes two activities which proceed from this basic tension in being and are "vertically" opposed to each other: In the activity of immanence, consciousness experiences itself as a final unity of completeness in events and content of awareness. This is the pole of self-containedness. In the activity of transcendence, consciousness apprehends receptively an external unity of

inexplicable apart from a transcendent reference in being. The open tension in being between essence and existence in the human person may not be resolved by exclusive reference to either one or the other at our level of being. This analysis of the existential limitations of man's being is a refutation in principle of all attempts to reduce the essential reality of being to mere existential givenness. Essence is "in-over" existence. The tensions of man's being in their totality are explicable only from an understanding of their analogy relation to the fullness of being in the analogia entis.

Przywara urges that the analogia entis, as the fundamental principle of our knowledge and being, may be made the basis of a comprehensive perspective in metaphysics which illumines the basic problems of philosophy. It makes it possible to relate particular problems in philosophy to a total metaphysical perspective. Przywara finds that the analogia entis is fundamental to our understanding of the relationship between subject and object. 16 It not only clarifies the essential relations of being in the human person, but enables us to understand the relations of the person to the world and other persons; it makes clear the ontological basis of the unity as well as the diversity of being in the act of knowledge. The relation between the subject and object in knowledge is not one of unrelated duality but of an analogy tension in being; the act of knowledge itself is explicable only from such an analogy relationship. An analogy designation (indicating likeness and unlikeness) makes it possible to comprehend in principle the relation of tension between the subject and object in the act of knowledge. Przywara insists that any other explanation than an analogy metaphysics does not do justice to the full givenness of experience. He believes that we may proceed from either the consciousness

completeness to which it is objectively related. The second pole of the tension is a "stretching-beyond-itself." In short, in the very ego itself there is an analogy relationship of "in-over" and immanence and transcendence. These two activities are not unrelated, but bear an analogous relationship (of tension) to each other in the consciousness. The analogia entis is implicit in the dynamic nature of the ego in the act of knowledge. Cf., Religionsphilosophie Katholischer Theologie, 3, 4.

¹⁶ Analogia Entis, 3-5.

of the subject (Kantian and post-Kantian philosophy) or the givenness of the object of knowledge (classical and scholastic philosophy).¹⁷ In the end, the result is the same if the determination of our metaphysics is genuinely realistic in character; a comprehensive explanation of the relation of the subject and object in knowledge is possible only by presupposing an analogy relationship between the two in being.

Przywara urges that much of modern epistemological theory is one-sided and incomplete because it has no adequate ontological basis from which to criticize and relate its understanding of the consciousness of the subject in the act of knowledge. The analogia entis makes it clear that the categories of knowledge are not merely imposed upon being, but are grounded in the consciousness of the knower and develop therefrom. The immanent categories of being come to expression in the act of knowledge. As our knowledge expands in scope, we become increasingly aware of the tension between the immanent categories of consciousness and the full formal categories of being in their essential character. The analogia entis confirms that the knowing consciousness is directed beyond itself to being in the very act of knowledge. It makes possible a comprehensive ontology because it makes explicit the analogy relation in being in the act of knowledge; however, it allows that our ontology may be criticized from a critical epistemology. As the fundamental principle of all speculation and reflection, the analogia entis signifies that philosophical inquiry is directed to a real object of knowledge in being. A phenomenological investigation of the different types of knowledge can only serve to reinforce its basic realism.

Our validation of the analogy relationship between the subject and object of knowledge is not complete in its full critical basis apart from an examination of our mode of knowledge. It requires for its completion a careful appraisal of the a priori and a posteriori in our understanding. Przywara does not presuppose that we may know the analogy character of being completely a priori; we may not establish simply a priori that our knowledge and being conform to the analogia entis.

¹⁷ Ibid.

¹⁸ Ibid., 14, 15.

A valid knowledge of the analogy relations in the totality of man's life and being is possible only from a comprehensive a posteriori examination of experience in its particularity; however, this knowledge may be clarified in its fundamental character by a dialectic of thought (which is essentially a priori).

Przywara argues that the major systems of classical and scholastic philosophy proceed by a dialectic of thought from the a posteriori to the a priori and from the a priori to the a posteriori.19 Knowledge of the fundamental character of being in the world is possible only from a double epistemological reference. The knowledge of the essential nature of reality given in this dialectic is not exhaustive but is only a knowledge of essence "in-over" existence. Because essence is "in" existence, we must proceed from existence to essence, from the a posteriori to the a priori. Because essence is "over" existence, we must proceed from essence to existence, from the a priori to the a posteriori. There is a constant dialectic in knowledge from the a posteriori to the a priori and from the a priori to the a posteriori because essence is both "in" and "over" existence. It is clear that existence may not be apprehended in its true character or be interpreted adequately apart from the recognition of its essential ordering. However, essence is not known in its purity or apart from its existential givenness and partic-

¹⁹ Analogia Entis, 18. The entire last section of Analogia Entis is given to an examination in detail of the role of the analogia entis in the philosophies of Plato, Aristotle, Augustine and Aquinas. Przywara believes that none of the major classical or scholastic interpretations of philosophy, Platonic, Aristotelian, Augustinian or Thomistic, were exclusively a priori or a posteriori in orientation. His interpretation applies most conveniently to the Aristotelian and Thomistic types of metaphysics. He argues as well, however, that Plato and Augustine were both epistemological realists: Plato recognized the indispensability of the particular insights of genius in their historical context. The a posteriori reference of Aristotle's theory of knowledge is made clear from his concern for the universal in the particular. However, both philosophers also recognized that our knowledge is not simply a knowledge of unrelated particulars but of particulars related to and participating in the universal. Knowledge of the particular is directed to a knowledge of the universal. Przywara concludes that the fundamental relationship in being between the a priori and a posteriori modes of knowledge is made most explicit and clear in the philosophies of Aristotle and Aquinas, in particular in their doctrine that the universal must be abstracted from concrete particulars.

ularity. In the dialectic of thought we seek for an essential knowledge of reality in the manifoldness of experience. Our last knowledge of essence is a knowledge in tension in existence. Przywara believes that this dialectic (implicit in the analogy relation between essence and existence in man's being) is fundamental to all comprehensive metaphysical analysis. The major systems of the *philosophia perennis* proceed from a mean between being and becoming and are neither exclusively a priori nor a posteriori in character; rather, they presuppose a dialectic of thought between these two modes of knowledge.²⁰

However, the problem of knowledge is not only a problem of an analogy tension (in a dialectic of thought) between the a priori and a posteriori modes of knowledge, but of the unity of truth in its fullness. Przywara arques that the analogia entis clarifies our understanding of knowledge at this point. It makes it clear that essence in existence in the world is directed beyond itself to the full transcendent logos of truth (as being and becoming in the world are directed to being in its fullness). Although we apprehend this logos only incompletely, its fundamental determinative character is made clear from the relative essential unity of the world in existence. The fundamental ordering of being in knowledge is not explicable from either pole of the analogy tension between essence and existence. (Przywara presupposes that unity cannot be explained ultimately from plurality.) Rather, we must presuppose a transcendent and ordering unity in order to explain the unity in plurality in the world. However, such a unity may be known only

²⁰ Przywara points out that a number of solutions have contributed to the final analogy basis of the philosophia perennis. We may argue that there is no essential unity whatsoever in the world and experience; in this case we must proceed entirely a posteriori in our attempt to understand reality. Or we may hold that there is a complete fullness of essential unity of thought and being. In this case we may proceed exclusively a priori in knowledge. (These alternatives were explored by Heraclitus and Parmenides respectively.) If neither of these alternatives is adequate for our understanding of truth, we may argue that there is a relative essential unity in existence which is not complete, but which may be clarified by a dialectic of thought. This dialectic attempts to comprehend the relative essential unity in the world by passing from the a posteriori to the a priori and from the a priori to the a posteriori. The third alternative is fundamentally one of an analogy metaphysics.

analogously from the relative unity of essence in existence in the world. The analogia entis makes clear the fundamental unity of being and illumines as well our understanding of the a priori and a posteriori modes of knowledge. The intention of our knowledge is indeed directed to the full essential meaning of reality; however, this meaning is always "in-over" existence. Philosophical reflection, the clarification of meaning in a dialectic of thought, enables us to approach the full essential logos of truth - but at a distance.21 However, the dynamic (analogy) tension between the a priori and the a posteriori modes of knowledge in our understanding cannot be resolved fully by any single philosophical interpretation because it has its ontological basis in the tension between being and becoming in the fundamental nature of the human person. A realistic philosophy must seek for the fullest possible comprehension of the essential nature of being in existence, but not a resolution of its essential dynamic in static concepts.

Przywara's interpretation may be clarified by consideration of the positions which he rejects. On the one hand, he rejects the exclusively empirical or existential philosophies which allow for no real essential ordering of being in existence.²² He insists that the relationships of being in existence have a real intrinsic ground in reality (against the strict empiricist interpretation) and that there is an authentic pattern of rational meaning "in depth" which may be apprehended at. every level of truth (against the radical existentialist interpretation). There is a comprehensible "analogy pattern" of "in-over" inherent in all our experience of knowledge and being. (Essence [and unity] is given with and in existence.) An a posteriori description of existence bears implicitly the marks of an ordering and directedness from the a priori. Przywara also rejects the idealistic type of philosophy which proceeds fundamentally a priori in its apprehension of reality.23 (He refers specifically to the system of Hegel as the idealistic interpretation which has been most provocative for his own study and thought.) He believes that the limitations of any perspective which presupposes that it is possible to appre-

²¹ Analogia Entis, 68, 69.

²² Ibid., 67-73.

²³ Ibid.

hend reality purely a priori apart from its historical relationships may be known from its own demonstrable a posteriori reference. Its historical conditioning may not be immediately apparent; however, a critical comparison with the *philosophia perennis* in its fullness makes it clear that no one particular philosopher has been able to apprehend a priori the fullness of truth and being. (Because essence and existence are in tension in the human person, no philosopher can know the world and history exclusively a priori, from thought alone.)

Przywara argues that thought in history is always in dynamic tension with thought and knowledge in their fullness. He develops his analysis of the tension character of knowledge in the world of becomingness and history from the Aristotelian distinction between potentiality and actuality.24 He insists that we do not comprehend essences directly from the fullness of eternal being but only essences made actual in existence. Our knowledge derives from the particular world of determined potentialities (potentialities are delimited as they are made actual) in which we live and not from pure potentiality in general. The positive determination of being in the world by the analogia entis precludes that the potential made actual may derive from "Nothingness" as Heidegger suggests. Neither does it allow that the world is self-complete and its own ground of reality; rather it exists in tension between being and becoming. The analogia entis makes it clear that the determination of actuality in the world is explicable only from a transcendent ground of being. It points to the determination of the actual from the potential by the fullness of being.

Przywara proposes a new appraisal of the historical character of knowledge from the analogia entis.²⁵ He is influenced in particular by Dilthey and Heidegger at this point in his interpretation, and suggests that it is possible to accommodate the doctrine of universals which is implicit in the analogia entis

²⁴ Ibid., 78, 86.

²⁵ Ibid., 28-33. "For truth is the realm of the pure Thus [essentiality], history that of the There [existence]. In the formula 'truth in-over history' [there] is expressed, consequently, the more primary 'essence in-over existence.' It is the final primary quality of the creature, that in it the ideative and the real are not identical and therefore truth and history are in tension with each other." Analogia Entis, 31.

to a recognition of the historical conditioning of all reflection and speculation. The basic insights of the analogia entis are not compromised by the recognition of the limitations and relativity in history of our knowledge of being if we can show an abiding relationship between the analogia entis and the philosophia perennis. Przywara describes a relation of analogy between "truth in history" and "truth in its fullness." On the one hand, he finds a radical urge to fullness of comprehension in the motivation of most creative thinkers in the philosophical tradition. He concludes that this motivation has been fruitful: Philosophical inquiry has led to real insight into the meaning of existence and being. On the other hand, Przywara is impressed by the inadequacy and one-sidedness of all historical philosophies in their particularity. He doubts that any single insight really comprehends the fullness of being. He finds assurance of the ultimate validity of philosophical knowledge only from the richness and many-sidedness of meaning which has been apprehended in the full breadth of speculation of the philosophical tradition. Przywara believes that philosophers have approached the universal logos of truth from one side and then another. Their knowledge of a priori truth is never free of a posteriori references, by reason of the limits of their particular place in the "stream" of historical becomingness. Their approach is always from a distance; they apprehend essence only from existence and not in its last ontological fullness. By entering in the fullest possible measure into the richness of the thought and experience of the philosophical tradition, we may understand in measure the universal logos of truth itself. However, by reason of the historical limitations of our knowledge and being, we never comprehend this logos fully or apart from our particular a posteriori reference. We may know it only analogically as truth is "in-over" history. An understanding of the analogical character of truth and being enables us to affirm that real knowledge is available in history even though this knowledge is not fully self-complete or exhaustive. The analogia entis is the principle of relation between truth in history and truth in its purity. However, it is not simply an a priori formula but a perspective of relationship in depth in knowledge which takes on increased meaning in philosophical reflection.

Przywara concludes from his analysis of the a priori and a posteriori relations of truth in history, as well as the relation between "truth in history" and "truth over history," that the fundamental problem of metaphysics (to which all other problems lead) is one of the immanence and transcendence of being. Reality is always richer in existential givenness and meaning than any single conceptual formulation. Moreover, being in becoming is not static but fundamentally dynamic and directed toward a fuller realization of its own essential being. Although our experience has an essential ordering and direction, the positive potentiality and fundamental ground of being are never given fully in experience. The relation between being in its particularity in the world and the fullness of being is essentially an analogy relation. Clarified in its essential character, the analogia entis provides a balanced perspective for the interpretation of the immanence and transcendence of being in its givenness in the world. It signifies that there is a relation of immanence and transcendence in reality ("in-over," "overout") at every level of being.

Przywara argues that the ontological basis of the immanence and transcendence of being in the world (in their analogy relationship in the analogia entis) may be made fully explicit only from a consideration of the relationship between the absolute and the relative.26 Our interpretation of the nature of the absolute is fundamental to our understanding of the relationships in being in its particularity and fullness. Our analogia entis metaphysics has made it clear that a knowledge of being is not possible from a pure a priori or a posteriori analysis alone, but only by presupposing a dialectic of thought between these two modes of knowledge. The ontological basis of our knowledge is made explicit in the analogia entis, when it is acknowledged that the tension between the a priori and a posteriori is irresolvable in itself because it is governed by a higher principle which derives from the nature of the absolute. The analogia entis signifies that all knowledge is governed by the absolute which we know only in its immanence and not in its full transcendent character.

²⁶ Analogia Entis, 34, 35.

Przywara urges that the tension between the a priori and a posteriori modes of knowledge may be resolved only in God as himself the fullness of being.27 Our interpretation of the immanence and transcendence of being must proceed to a consideration of the relation between God and the world. Przywara enumerates the alternatives which present themselves to us in our understanding of this relation. The relation between God and the world, as the absolute and the relative respectively, may be conceived as one which exists as a single unity in the world. From this point of view, being in its particularity (in the world) must be interpreted as the reflection of the fullness of the knowledge and being of the deity who is present in all his fullness in the world. However, the problem of the relative and the absolute is really a problem of the relative in the absolute. The relationship between God and the world is one between a totality which exists in potentiality, namely, the world, and a totality which exists in actuality, namely, the deity; it is a relationship between a totality of becomingness and a totality of being.

Only in the philosophy of Aquinas. Przywara concludes, do we find an interpretation of reality which does justice to the full immanence and transcendence of being as well as to the absolute and the relative and God and the world.²⁸ Aquinas

²⁷ "In this way it becomes clear, how the 'God over-in creature' necessarily appears as final in the formal problem of metaphysics, that is as its forming basis. We have with this a natural theology inherent in the concept of metaphysics in general which precedes that natural theology through which a metaphysics is formulated. We have in this the forming basis of the formal appearance of the 'creaturely metaphysics'; its 'essence in-over existence' is cut through vertically by the 'God over-in creature'." Analogia Entis, 37. (Przywara applies the term "creaturely metaphysics" to a metaphysics based on the analogia entis.)

²⁸ Przywara believes that classical Greek philosophy never achieved a really satisfactory understanding of the immanence and transcendence of being: in particular, it was never able to join the two in a balanced interpretation. Plato has a remarkable appreciation for the transcendence of being, but does not explain the full reality of being in the world in his doctrine of the eternal character of all essential knowledge. Aristotle had a deep appreciation for the particularity of existence but offers no adequate explanation of the transcendence of meaning and being over the world; his doctrine of the unmoved mover is too limited in scope. Przywara works out his interpretation in detail in the last section of Analogia Entis.

makes clear the full ontological bases of the analogia entis as the principle of relationship of the immanence and transcendence of being. He argues that God is the fullness of being and in his own nature the completeness in identity of essence and existence. All persons and reality in the world are "unities in tension" of essence and existence; they are not self-complete in themselves, but rather dependent upon and directed to the deity. God and the world bear an analogy relation to each other in being: This is possible only if there is a real determination of being in the world and created being is a genuine second cause.²⁹ Aguinas rejects a strict image-copy relation and insists that God is immanent in his power and yet veiled in mystery in the last fullness of being. The fullness of being is both immanent and transcendent over the world. Aguinas, in making clear the analogy character of being, affirms the full givenness of the immanence and transcendence of being in reality. He does not sacrifice either characteristic of being for the other, but rather seeks to encompass both in an analogy tension. In his metaphysics, he recognizes that a comprehensive doctrine of immanence and transcendence is possible only from a doctrine of immanence in transcendence (and an analogy relationship of "in-over" at the last level of philosophical insight). Przywara finds that Aguinas' interpretation of the analogia entis has its last basis in the Hebrew-Christian doctrine of creation which makes it clear that the deity exists as radically distinct and separate from the world of created being. Nonetheless, he is intimately related to the world as its ground and goal. The analogia entis signifies in its last fullness of meaning that creation is ordered by an immanent logos which is yet transcendent, so that the full reaches of its knowledge and being are unapproachable to the creature. We may not consider here the theological implications of Przywara's interpretation, but note only that he believes that an analogia entis metaphysics is not self-complete, but rather open at the last levels of philosophical knowledge to a greater knowledge from the deity in special revelation.30

²⁹ Analogia Entis, 93.

^{30 &}quot;For the analogia entis knits all that is creaturely together into a total likeness to Deity, and yet to such a likeness as in its ultimate essence is in a condition of potentia oboedientialis..." Religionphilosophie Katholischer Theologie, 24.

A number of the particular characteristics of Przywara's analogia entis metaphysics have received special attention in the discussion and criticism of his philosophy. His interpretation represents an attempt to justify the main bases of classical and scholastic philosophy for contemporary thought. Przywara found that his arguments were most effective in debate and discussion when they were directed against the first presuppositions of other systems of philosophy. He was not interested in the detailed exposition of the particular arguments of Thomistic philosophy because he found it necessary to justify the first premises of such a philosophy from a comprehensive reinterpretation. It is important to note that Przywara rejects strict Thomistic intellectualism in his own eclectic synthesis. He does not accept the Aristotelian-Thomistic doctrine of the universal and particular, but affirms rather the unique particularity of each individual person.31 He is influenced by Scotist and Molinist interpretation as well as by contemporary existential philosophy at this point. (Przywara finds that Aquinas' works include a number of different interpretations of individuation, one of which has become dominant in most of Thomistic philosophy.) 32 Przywara's concern for the particular historical character of knowledge distinguishes him from most neo-Thomistic philosophers. He argues that Thomistic philosophy compromises its fundamental Aristotelian realism when it accepts a doctrine of the intuition of being which is essentially Platonic in character.33 He charges that such a doctrine has became dominant in much of French and Belgian neo-Thomism.34 He urges, further, that Catholic philosophy can learn more from existentialism than from the idealistic systems of thought in contemporary philosophy. Przywara's conviction about the historical character of a realistic metaphysics leads him to conclude that a philosophy based on the analogia entis

31 Analogia Entis, VI-VIII.

^{32 &}quot;Thomas von Aquinas als Problematiker, Ein Versuch," Stimmen der Zeit, CIX, 188-199.

³³ Przywara criticizes in detail the philosophy of Maréchal in Kant Heute (Oldenbourg, Munich, 1930), pp. 65-71.

^{34 &}quot;Die Problematik der Neuscholastik," Kant-Studien, XXXIII, 73-98.

must be an open and growing one and not a closed deductive system.

Przywara's interest in modern existential philosophy and the relevance of Heidegger's basic insights for the reinterpretation of the philosophia perennis has its basis in his own deep appreciation of the fundamental character of Catholic philosophy. Przywara insists that Catholic philosophy, as determined by the analogia entis, always joins speculative theory with existential religious insights.35 His own philosophy is determined significantly from the "existential insights" of Augustinian theology.³⁶ Augustine in particular among Catholic philosophers, Przywara urges, has a deep appreciation of the dynamic character of being in existence. However, his is always a balanced existentialism because it joins experience to an essential knowledge of being. (Both Augustine and Aquinas agree on the fundamental rationality of being at all levels of reality; the analogia entis signifies that reality in existence bears an essential ordering.) Przywara believes that the acknowledgement of the existential character of the analogia entis (which has its basis in the a posteriori reference of the philosophia perennis) will keep us from philosophical dogmatism. He finds that we already have too many formulae in metaphysics, but often lack existential insight into being. He does not attempt to construct a strict deductive system (although his logic is rigorous and careful), but rather offers a synoptic

^{**}Metaphysik und Religion," Stimmen der Zeit, CIV, 132-140: "Common to 'metaphysics' and 'religion' is the central point of the analogia entis and the presupposition of the natural self-revelation of God in his creation, so that on the one hand metaphysics bears within itself an element of religion (the presupposition of the self-revelation of God) as on the other hand religion contains an element of metaphysics (the criterion for recognition of the analogia entis)" (p. 137).

³⁶ Przywara gives the last section of Religionsphilosophie Katholischer Theologie to an exposition of the relations and unity of Augustinian and Thomistic theology in the analogia entis. Not Augustine or Aquinas but Augustine and Aquinas, he argues. His rich appreciation of Augustinian philosophy and theology is made clear in his Augustinus, Die Gestalt als Gefüge, Hegner, Leipzig, 1934. This has been translated into English as an Augustine Synthesis. However, the excellent introductory section was not included in the English translation.

view of a total perspective. The many-sidedness of his interpretation makes it clear that the *analogia entis* has significant implications for a wide variety of problems in philosophy.

NIELS C. NIELSEN, JR.

The Rice Institute.

Explorations

SOME THESES ON EMPIRICAL CERTAINTY

- 1. The question as to the certainty of experiential statements, i.e., of sentences which "report data of direct experience," is tantamount to the problem whether, in an adequate logical (not psychological) reconstruction, the empirical basis of individual or of collective scientific knowledge can itself be considered as subject to revision.
- 2. That experiential statements must be unquestionably certain cannot be shown by reference to actual instances: Any sentence purporting to describe experiential data may conceivably be a lie or involve inadvertent misuse of language. Hence, experiential statements that are certain play, at best, the role of hypothetical elements in a logical reconstruction of knowledge. The assumption of such incorrigible elements is not necessary.
- 3. The acknowledgement of an experiential statement as true is psychologically motivated by certain experiences; but within the system of statements which express scientific knowledge or one's beliefs at a given time, they function in the manner of postulates, for which no grounds are offered.
- 4. Some have argued that experiential statements must be certain, or else other empirical statements could not, short of an infinite regress, even be probable. For a probabilistic conception of empirical knowledge, however, it suffices to assume that at any time some experiential statements are treated as unquestioned (though not as forever unquestionable), and that the probability of all other empirical statements is determined by reference to them.
- 5. The conception of experiential statements as corrigible yields a more adequate reconstruction of empirical knowledge and of scientific procedure: Empirical knowledge is concerned, not merely with descriptions of individual phenomena, but also with theoretical generalizations about them. And a conflict between a highly confirmed theory and an occasional

recalcitrant experiential sentence may well be resolved by revoking the latter rather than by sacrificing the former. Science offers various examples of such procedure.

6. Doubt as to the truth of previously acknowledged experiential sentences is sometimes held to be meaningless for lack of a more fundamental standard of appraisal. But it is a matter of decision whether to grant accepted experiential statements absolute epistemic priority or whether to make any empirical assertion subject to appraisal by reference to both the experiential basis and the theoretical structure of the system that would result from including the assertion in the totality of accepted statements.

CARL G. HEMPEL

Yale University.

COMMENTS ON MR. HEMPEL'S THESES

I

- 1. This question concerns the possibility of revising statements about the empirical basis of knowledge. The proper answer will depend on what we mean by "statements about sense-experience." Professor Hempel's Thesis 5 and Thesis 6 are true only if these statements are assumed to be formulated in a material-object language (e.g., "Smith sensed redness at 5 P.M."); Thesis 3 and Thesis 4 could be true only if they were assumed to be otherwise formulated (e.g., "Blueness here now").
- 2. Because of the possibility of lies, or the misuse of language, I believe that Professor Hempel's formulation of the problem of empirical certainty must be interpreted as a convenient abbreviation, in linguistic terms, of a question about beliefs. A complete formulation of the question would have to make some reference to the speaker's beliefs as he utters an "experiential statement."
- 3. It is an analytic proposition that no grounds are offered (formulated) for statements which are basic. There is evidence

for a basic experiential statement, and this evidence ordinarily consists of the very experiences which motivate us to acknowledge the statement as true.

- 3. & 4. These two theses seem to assert that experiential statements will be basic (unquestioned "postulates") in an adequate logical reconstruction of knowledge. But if experiential statements are material-object statements, there is no epistemological reason for making them basic; indeed, statements such as "Smith sensed redness at 5 P.M." would ordinarily be thought to be less probable than many non-experiential statements (e.g., non-experiential statements about the familiar objects in our immediate environment).
- 5. & 6. These last two theses could not be true unless experiential statements are material-object statements. The recalcitrant experiential statement which we revoke because it conflicts with a highly confirmed theory, is always a statement about the past, and makes some reference to a material observer and physical time. It does not seem that we should ever be justified in revoking "Blueness here now" because it conflicts with a theory.

Is there a meaningful difference between these two interpretations of "experiential statement"? I suspect that this is the point which troubles many philosophers about the problem of empirical certainty.

RODERICK FIRTH

Swarthmore College.

II

- 1. The crux of the matter lies in the following two questions: Are there any statements (overt or covert) whose mode of causation entails that they are true of the situation in which they occur? Must there be such in order for human cognition to be justifiable?
- 2. I agree that the answer to the first question is No. The plausibility of the opposite answer rests on a failure to

note that the necessary truth of "statements which express observations" is simply a consequence of the fact that we wouldn't say of a statement that it "expressed an observation" unless it were true.

- 3. Although there are no statements whose mode of causation entails that they are true, there are statements whose mode of causation makes it likely that they are true. Consider, for example, the utterance "(The ball is) out" evoked by his environment from an honest referee in the course of a game.
- 4. I also agree that the answer to the second question is No. In order for our symbol activities to provide us with information about the world, it is indeed necessary that there be a connection between at least one mode in which statements are caused and the truth of the statements caused. But it is sufficient that statements caused in a certain way be likely to be true of the situation in which they occur.
- 5. If the only way in which a statement could acquire probability were qua being a token of a type which is probable to various degrees with respect to various sets of other sentence types, then tokens of sentences belonging to one coherent system could never be better off with respect to probability than tokens of sentences belonging to any other coherent system. Once, however, we note (see 3 above) that tokens can be probable otherwise than as instances of a type which stands in probability relations, the way is clear for an understanding of the role of observation statements in human knowledge.
- 6. An observation statement is ipso facto not a reasoned statement, i.e., a statement which occurs as the conclusion of an argument. However, postulates connotes "choice," while the force of an observation statement lies exactly in its not being chosen, but rather wrung from us, even though the set by which we prepare to make them involves choice.
- 7. Empirical statements other than observation statements are justified by finding arguments the conclusions of which have the same meaning as the statements to be justified. When one of the premises is an observation statement, we usually do not demand that the process of justification be continued; not,

however, because we think such statements incapable of justification. On the contrary.

- 8. Yet observation statements as such are not justifiable in the manner described in the previous paragraph. For since their meaning depends on the context in which they occur (their "egocentric" character), no argument can have a conclusion which is a token of the same type as a given observation statement. To be sure, an argument can indeed be found of which the conclusion is a non-egocentric statement which corresponds in a familiar way to the observation statement, but this argument won't justify the observation statement qua observation statement. The latter purpose can be accomplished only by finding an argument of the form, "The statement in question was caused in such and such a manner, therefore it was probably true." I take it that it is the justifiability of observation statements along this line that Hempel has in mind in 3.
- 9. Even if there were statements whose manner of causation entailed their truth, so that they would be in one sense "incorrigible," this would by no means involve that they were not "subject to revision," nor do the philosophers who postulate them believe that they are not subject to revision. Once the statement is past (and only then can there be question of revision), we would indeed be entitled to say that if the statement was caused in a certain way, then it was true, but that it was caused in that way would be a claim no less corrigible than other historical statements.

WILFRID SELLARS

University of Minnesota.

III

1. I believe that the most questionable of Professor Hempel's theses is the first. The traditional approach to the problem is to say that certainty and uncertainty are characteristics, not of sentences, but of beliefs. And some of Hempel's remarks suggest it may be difficult for him to ignore the epistemological issues which the traditional approach involves.

- 2. He points out that the sentences in which he is interested do in fact "express" beliefs and he intimates that, in deciding whether a sentence is certain, we must consider whether it is an adequate expression of someone's belief. "That experiential statements must be unquestionably certain cannot be shown by reference to actual instances: Any sentence purporting to describe experiential data may conceivably be a lie or involve inadvertent misuse of language." Presumably the difficulty with sentences which are lies, or which misuse language, is that they may express inaccurately the beliefs of the person who asserts them. But an experiential sentence may be an adequate expression of someone's belief and still not be certain. To decide whether the sentence is certain it would seem essential to consider the belief which the sentence expresses and also the experience to which the belief and therefore the sentence refer.
- 3. Hempel does say that "the acknowledgement of an experiential statement as true is psychologically motivated by certain experiences." But the concept of motivation would hardly be enough to enable us to explicate either the concept of empirical certainty or the concept of experience justifying (providing a basis for) a belief. It is easy to find instances of beliefs which are motivated by experience, but for which we should not want to claim either empirical certainty or justification.
- 4. Hempel's rejection of the traditional approach is probably based upon certain methodological principles from which he is able to infer that sentences expressing the traditional issues do not have any meaning. The traditionalist might point out, however, (a) that there is better reason for holding that some of his beliefs are certain than there is for accepting the methodological principles; and (b) that, in judging the adequacy of these methodological principles, we must ask whether they take account of the fact that some beliefs are certain. It seems quite likely, however, that controversy over these two points would lead to an impasse.

RODERICK M. CHISHOLM

Brown University.

IV

- 1. If "empirical basis" means "a basis in experience," it is as uncertain as any other item in experience. All the theses then are true, obvious and unimportant, being merely reformulations of the fact that "experience" refers to a world of encounterable contingencies. But if it means "a basis for experience," a basis is not only not uncertain, but inescapable, since without it the experience would be impossible.
- 2. A basis for experience is a presupposition of experience. Uncertainty regarding the truth of meaning of an empirical assertion is consistent with the incorrigibility and unavoidability of what the assertion presupposes.
- 3. Presuppositions are not postulates without warrant. Nor are they dependent for their truth, meaning or being on a system of statements. To say anything at all we must presuppose at least, (a) the existence of a language, (b) the existence of a communicator, (c) the possibility of an interpreter. The statements, "there is no language," "there are no communicators," "it is impossible to know what anyone says," all reject their own presuppositions. Although logically self-consistent, they are absurd, incapable of being true. They are cases of empirical statements which are necessarily (but not logically) false; their contradictories are necessarily (but not logically) true.
- 4. Probability statements, like any others, make presuppositions which are not merely unquestioned but are unquestionable. Every probability statement, for example, presupposes a plurality of cases neither completely independent of nor completely dependent on one another.
- 5. A presupposition is not identical with a theory. It is a fact and not a statement, and when expressed in a statement, it might have the form of a singular; whereas theories are statements and always encompass a possible plurality. The conflict between presupposition and statement must always involve the abandonment of the statement or of both presupposition and statement.

PAUL WEISS

RESPONSE TO COMMENTS

- 1. Certainty, like truth, can be construed so as to apply directly to statements (whether they are believed or not); this avoids the psychologistic connotations of the concept of certainty of beliefs. The certainty of an accepted experiential statement has then to be conceived neither as logical necessity nor as indubitability in the psychological sense, but rather as systematic exemption from revision in the light of additional evidence (To comments by Mr. Chisholm, and to Mr. Firth's point 2).
- 2. Experiental sentences might be expressed in a phenomenalistic or in some "material-object" (Mr. Firth's term) idiom. In the latter case, it is preferable to construe them as attributing directly observable properties or relations to physical objects ("This is a blue liquid"; "The needle of this instrument coincides with the third mark on the scale"), rather than in the manner of "Smith sensed red at 5 pm"; for agreement among observers is much more readily obtained in regard to sentences of the former type; hence they are better qualified to represent a common, and fairly stable, basis of intersubjective empirical knowledge.
- 3. When an experiential sentence is accepted "on the basis of direct experiential evidence," it is indeed not asserted arbitrarily; but to describe the evidence in question would simply mean to repeat the experiential statement itself. Hence, in the context of cognitive justification, the statement functions in the manner of a primitive sentence. This latter term avoids the misleading connotations of the word 'postulate' pointed out by Mr. Sellars, with whose comments I am in practically complete agreement (To remarks by Mr. Chisholm and Mr. Firth.).
- 4. However, statements of the experiential type also permit of indirect test: it involves the deduction from them, in conjunction with suitable generalizations or theories, of other experiential statements, for which direct evidence is available. The possibility of thus obtaining disconfirming indirect evidence militates against the conception of accepted experiential statements as irrevisable. This remark applies even to experiential

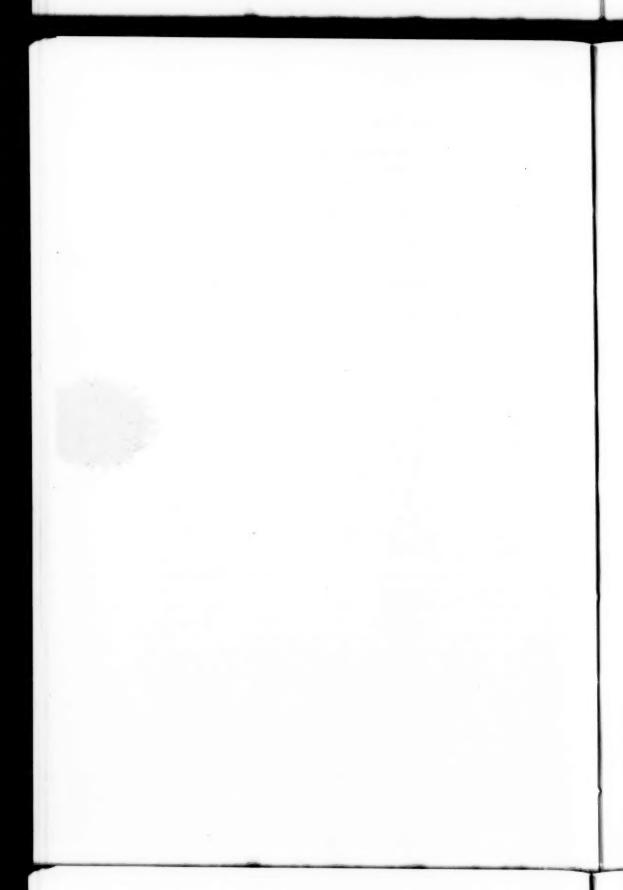
statements in the phenomenalistic idiom; for these could not serve as a basis of any kind of empirical knowledge if they did not enter into systematic connections expressible in general theoretical principles. Therefore, "Blueness here now," if construed as incapable of conflict with any generalization or theory, could not function as a basic element in the systematic validation of empirical knowledge.

5. The claim advanced by Mr. Weiss that "to say anything at all we must presuppose at least, (a) the existence of a language, etc.," can be reformulated thus: The statement, "There are instances of significant use of language," implies, and thus presupposes, the statement "There is a language, and there is at least one communicator and one interpreter of that language." Now, this implication holds by virtue of the meaning of "significant use of language"; it is therefore logically necessary. But it would render the "presuppositions" in question necessary only if the statement S, "There are instances of significant use of language," were necessary. S. however, is contingent. If it be argued that the very occurrence of a token of S constitutes conclusive evidence that S is true, then it should be borne in mind that (a) such occurrence itself is contingent; (b) the qualification of any string of marks as a significant linguistic expression (rather than a mere doodle or an accidental pattern in ink) has the character of an interpretive hypothesis which cannot be conclusively verified by observational evidence.

CARL G. HEMPEL

Yale University.





Discussion

SIMILARITIES IN EASTERN AND WESTERN PHILOSOPHY

What exactly is to be meant by the phrase "synthesis of Eastern and Western philosophy"? Is the Eastern way opposed to the Western way of thinking? This is indeed a vital point which has to be settled.

We are told 1 that some of the most important points discussed at the recent conference of East-West philosophers were the following:

- (1) The East uses concepts by intuition, while the West uses concepts by postulation.
- (2) The West wants logical concrete proof, while, according to the East, reality is known only by intuition.
- (3) Eastern philosophies are primarily practical, while Western philosophies are primarily theoretical.
- (4) The West is concerned basically with the present world, while the East considers the world hopeless because it is worthless.

How could these conceptions be formed? We in the East beyond doubt keep abreast of the philosophical movements of the West, particularly of those of the English-speaking countries. The syllabus for philosophical studies in Indian universities, and I am sure in other Eastern universities as well, covers the major philosophies or philosophical schools of the West. So here on our part there could be no confusion as to the nature of Western philosophy. On the other hand, the major philosophical works of the East are now available in English translations. More than half a century ago Max Müller, the illustrious Orientalist, edited in English the whole series of the Sacred Books of the East, including the chief philosophical treatises. In recent times again two great histories of Indian philosophy have been published by two eminent scholars of

¹ See Dr. Charles A. Moore's interesting retrospect of the conference in Aryan Path, December 1949.

Indian philosophy: Prof. S. Radhakrishnan and Prof. S. N. Dasgupta. These works run to several bulky volumes. We have also a short History of Indian Philosophy by Prof. Hiriyanna. Further, a good many special studies in English on Vedanta, Nyãya and other systems have been published during the past few years. So in the present circumstances a student of philosophy in the West cannot say, unless he deliberately shuts out all Eastern ideas, that he could know nothing of Eastern thought and of Eastern viewpoints. If the conference at Honolulu was inspired by the idea of a possible synthesis of Eastern and Western philosophy, the conference, I should say, was actuated by a confusion, on the part of some in the West, about the East, particularly about Eastern philosophy.

However, we are told that at Honolulu some Western and Eastern philosophers came together and discussed some problems regarding methodology, reality, morality, society, and so forth. From the account of the proceedings, brief as it is, it appears that intuition was taken to play the main part, so far as Oriental philosophy was concerned. But the conception that Eastern philosophy is all intuitive derives from the confusion between mysticism and philosophy proper. And to this confusion many Eastern scholars are subjected no less than many Western historians of Oriental culture. It hardly needs saying that the Vedas and the Upanishads are admittedly the record, though incomplete, of the spiritual experiences of India's sages and seers of the past. So it is rather absurd to speak of anything like the philosophy of the Vedas or the Upanishads.

The term "intuition" is a much abused one. It is often used in an elastic sense and is taken to cover experiences ranging from the highest spiritual realization to an immediate, direct contact with fact, or a vague feeling. We can then well regard sense-perception as a kind of intuition inasmuch as sense-perception is direct and immediate. If we, however, choose to take intuition as non-sensuous immediate experience of reality, intuition is not always a mystical experience. Mere apprehension of reality may mark a stage far removed from mystical realization. So we must be slow to link intuition even in its non-sensuous form to mysticism, although often enough the phrase "intuition of Reality" is taken to mean an experience of reality which is just mystical.

On the other hand, often too much emphasis is put upon the Vedanta. So many in the West and, surprisingly, some in the East take Sankara's Vedanta as representative of Indian thought. As Vedantists point out, we cannot proceed abruptly in our quest of reality. In the Vedantic scheme of realization, as we know, the Scriptures occupy a very important place. We are asked to proceed systematically, fixing first on the Scriptural Texts that enshrine the highest spiritual experiences of the sages of the past. First of all, then, we must have to apprehend the meaning of the Texts. But it is not made quite clear whether we can call such apprehension "intuition." At all events the meaning of the Texts is first to be apprehended and then reasoned out. In other words, the apprehended meaning is to be articulated into concepts or a concatenation of concepts. Thus we start with apprehension of the meaning of the Scriptural Texts and then pass on to philosophize. Indeed the aforesaid apprehension is a kind of intuition, and the Texts mentioned undoubtedly embody the spiritual experiences of the past seers. So, as we pass from the apprehension of the Scriptural meaning to philosophizing we really pass from intuition to concepts. That is the Vedantic way. And if we follow this analysis we can say that a concept is not only empty, but even impossible without a relevant intuition.

Further, after the apprehended meaning has been established through reasoning we take to contemplation. And contemplation being consummated, we plunge into an overall realization, which we may as well call a supreme experience of Reality. Obviously we start with the intuition or intuitions. as they are called, embodied in the holy Texts, which intuitions are evidently objective to us, and then rise by speculation and contemplation to a supreme subjective intuition. The apprehension of the meaning of the Texts is no doubt subjective and may be regarded as an intuition of a sort. But this apprehension is nothing but intuiting the fact of intuition on the part of some others and is no intuition of Reality on the part of the subject concerned. However, according to Vedanta, philosophy is not an independent search, but is only a handmaid to mysticism. No wonder then that those who make overmuch of Vedanta maintain that Eastern philosophy is based upon intuition.

The truth, however, is that besides Vedanta there are many other systems of philosophy in India which not only differ from Vedanta in their details, but also from one another. Whatever the history of the word "philosophy," the word today has a definite fixed meaning, although even now it is employed in a somewhat loose sense in common parlance. Etymologically, "philosophy" means "love of wisdom," and originally the word meant "knowledge in general." With the growth of human thought and with the ramification of specializations, the term "philosophy" came to signify a definite study. Today, philosophy as distinct from science, art and history is a speculative investigation of reality. Philosophy is analysis in thought without any undue assumption or presupposition.

It is untrue to say that there was no philosophy in the modern sense of the term in India of the past. We can definitely say that the Buddhists, Naiyãyikas and Vaisesikas among others built up speculative schools of philosophy and logic that compare well with any important school of Western thought. So to say that Eastern and, for that reason, Indian philosophy is based upon intuition is to take a part for the whole and to betray ignorance as to the philosophical situation of India.

Again, intuitionism is not peculiar to Indian philosophy. Intuitionism in some form or other marks the cycles of philosophy in the Western world also. Greek philosophy apart, there was much of intuitionism in Gnosticism and Neo-platonism. In the mediaeval period, especially in the early part of it. Christian theology was developed by way of an interpretation of the content of Christianity which was based upon the revelation of the Deity in Jesus Christ. There is a striking similarity between the scholastic and the Vedantic conception of philosophy as an interpretation of revelation, no matter however much scholastics and Vedantists may differ as to the nature and content of revelation. Intuitionism is unquestionably a very important phase even of contemporary European philosophy. For instance, Bergson was an anti-intellectualist who devoted his major works to establishing the thesis that we must discard the intellect and adopt intuition as the proper organ of philosophizing. He tirelessly spoke of intuitive metaphysics. In view of such facts how can we, I wonder, speak of Western and Eastern philosophy as though they fall into two opposed groups, such that Eastern philosophy proceeds by intuition, the abstract and the alogical, while Western philosophy proceeds by concepts, the concrete and the logical. Truly, barring scientific philosophy, the major lines of thought developed to date in the West, such as theism, pantheism, pluralism, monism, Deism, materialism, idealism, empiricism, solipsism or subjective idealism, realism in its different forms, and so on, are met with also in Eastern systems. In some Indian systems even pragmatism was anticipated. There is therefore no need for any synthesis of Western and Eastern philosophy. Any such synthesis is otiose.

We may now remark: philosophy like art and literature is a spontaneous expression of spirit. It is essentially creative, in the sense that philosophy is the supreme effort the human spirit makes to resolve the besetting problems of life and existence. In short, to philosophize is to think things out. But we should not confuse philosophy as creative thought and philosophical scholarship. Scholarship is an acquisition which, without an ability to think, is a dead weight. Scholars are acquisitive, while philosophers are creative. In any case, we cannot produce any philosophy by way of a majority vote. Neither can we produce any philosophy to order. Granted that there is need for a synthesis of Western and Eastern philosophy, such a synthesis, if possible, would itself be a philosophy and would have to work itself out. But the needed synthesis cannot be achieved by means of resolutions passed at any conference of philosophical scholars from all over the world.

Some maintain that Eastern philosophies are practical, while Western philosophy is all theoretical. I am at a loss to understand what exactly is meant by this view. The statement, "Eastern philosophies are practical," may mean that Eastern thought was provoked by the pressing problems of life, that thinkers in the East were initially seized with the sense that life was too full of sorrow and suffering, and that they started speculating only to find a way out of the welter of life. That was precisely the case with Charvakas, Buddha, Buddhists, and so on. Gautama was the son of a king and had everything men covet on earth. Still his mind was troubled by

the fact of disease, decay, old age and death. These presented to him formidable problems and set him thinking. He thought hard, but failed to solve them. In the end he renounced the world, including all that men usually hold dearest to their hearts, and went about in search of the ultimate solution. The solution he at last found was elaborated in his teachings and later partly in Buddhist thought. Other thinkers worked out their solutions in their different ways. There is no difficulty in regard to the point mentioned above: Indian philosophers began by saving that they launched upon speculation in the hope that they might put an end to the sorrows and sufferings of life. Eastern philosophies are indeed practical in this sense. But can we contrast Eastern with Western philosophy in that the former is practical, while the latter is theoretical? In the context of such a comparison much is often made of wonder as the starting point of philosophy in the West. Plato in the Theaetetus and Aristotle in his Metaphysics, for instance, suggest that wonder is the beginning of philosophy. Far down the centuries, Kant said that two things filled his mind with wonder: the starry heavens above and the moral law within. But, we cannot explain philosophic wonder in terms of idle curiosity. Not every one wonders at existence in general or at the starry sky or at any thing like morality. Death, disease and dotage, sorrow and suffering are facts. If some find problems in them they are men apart, to be distinguished from other men. This grasp of problems is important. When it is said that philosophy begins in wonder or that one is stirred to philosophize by sorrows and sufferings, all that is meant is this, that philosophy starts with a grasp of problems of life and existence. It is not very important whether the sense of problem is innate or proceeds under pressure of some circumstances.

Even if we choose to call Eastern philosophy practical in the sense elaborated above, we find practical philosophy in a far sharper sense in the contemporary West. To take one conspicuous example, pragmatism is practical in all senses. According to pragmatists, reflection or speculation, which is the fountain of philosophy, is stirred only by a problematical situation. A problematic situation is one which arrests the even flow of practical life. This cannot be resumed until the problem

in question is resolved through reflection. So pragmatism is practical philosophy, in the sense that pragmatism in its method as well as in its end is subservient to practice. If this be so, is it not then idle to say that Eastern philosophy is practical, whereas Western philosophy is theoretical?

It may, however, be contended that Eastern philosophy is lived, while Western philosophy remains mere speculation. This contention also is based upon a confusion. There is, of course, such a thing as armchair philosophy. It is a hobby like any other, such as football, cricket, making pets of animals, and so forth. But armchair philosophy is pseudo-philosophy inasmuch as it does not start with any intrinsic grasp of problems. As regards true philosophy we find that a philosopher is on fire with his problems, and their solution is with him an all-absorbing question. If he now comes to any settled ideas, they enter into the texture of his being and go to determine his whole outlook. This is true as much of Eastern as of Western philosophers - Plato, Aristotle, Plotinus, Kant, Hegel and Marx in the West and Sankara, Ramanuja and Madhva in the East, to mention only some most prominent philosophers of the world. So Eastern and Western philosophy are, broadly speaking, alike. There is no point in saying that East is East and West is West in so far as philosophy and philosophical studies are concerned.

Further, it is far from true to say that Eastern philosophy regards the world as hopeless, while Western philosophy is basically concerned with the present world and its betterment. Indeed Buddha and some Buddhist schools, particularly the Mādhyamikas and Sankarites, set at naught the world and worldly life. But in India there were many schools of realism and idealism, which gave a distinct status to the world in their scheme of the universe and a significant rôle to socio-moral life.

There is no gainsaying the fact that modern scientific culture in the West very much emphasizes and encourages a positive attitude towards the world. But it is also a patent fact that before the advent of science Western civilization was for the most part shaped by the Christian faith, whose attitude towards the world was negative. The early Christians were well aware of the shortcomings of worldly life as judged by

the divine standard revealed in the teaching of Jesus Christ, and that was why they founded an altogether new order of life known as monasticism. Moreover, as on the one hand some Eastern philosophers regard the world as the manifestation of the Divine and thus raise the world to a position of paramount importance, so on the other some pessimists in the West dismiss the world as a hopeless mess and discard life as a labyrinth. Truly, outlooks on life vary with ideologies. And ideologies that make for pessimism or optimism are met with both in the East and in the West. So in the matter of outlook on life there is no absolute division between the East and the West.

A. C. Das

Calcutta University.

Notes and Observations

TWO WAYS OF ONTOLOGY IN MODERN LOGIC

I

Scope of the paper

Though for mathematical purposes extensions suffice,¹ we know no adequate extensional² analysis of modal or belief sentences, or in general, of sentences expressing a proposition³ whose subject⁴ is another proposition. Among intensional logicians we find a fairly sharp division into those who admit extensions as well as intensions,⁵ and those who admit only the latter.⁶ Typical of the former we choose Frege ¹ and Church; в of the latter, Fitch в and Smullyan.¹ The ontology of Frege¹¹ is replete with objects ¹² we believe to have no bearing on this discourse,¹³ while of Smullyan's ontology we have no precise indication. Hence we shall concentrate on Church vs. Fitch, believing that the approaches of Frege¹⁴ and Smullyan to the evening-star paradox¹⁵ are sufficiently close to those of Church ¹⁶ and Fitch respectively to justify the present grouping.

¹ But are not necessary, because in mathematics we are only interested in those properties of classes which are determined by their membership: cardinal number, measure, etc. All these properties are shared by classes which have the same membership, even if we have no axiom to the effect that all properties are shared by such classes. See fn. 8 of my "Report on Some Investigations" Journal of Symbolic Logic, vol. 16, p. 41, and references given therein.

² In the sense of Church, The Calculi of Lambda-Conversion (Princeton, 1947), ch. 1.

³ What is expressed by a sentence, necessary or contingent, the object of an intellectual act, distinct from such acts and from sentences.

⁴ In the sense that the former "says something about" the latter. Cf. modal and belief sentences.

⁶ It should be stated outright that no reference is intended in this paper to intensions in the sense of Weiss (Reality, ch. 7) nor to Carnap's treatment in Meaning and Necessity.

⁶ Such logicians may be distinguished by their refusing to admit any entity denoted both by "gorgon" and by "six-sided pentagon."

⁷ Frege, "Über Sinn und Bedeutung," Zeit. fur Phil. und phil. Kritik, C (1892), pp. 25-50, Grundgesetze der Arithmetik (Jena, 1893). For

The ontology of Church ¹⁷ consists of truth-values, individuals, ¹⁸ functions ¹⁹ (propositional ²⁰ and otherwise) and senses ²¹ (including attributes, propositions and individual concepts ²²).

English translations of the former, see *Philosophical Review*, vol. 57, pp. 207-30; *Readings in Philosophical Analysis* (New York, 1949), ed. Feigl and Sellars.

⁸ Church, "A Formulation of the Logic of Sense and Denotation" in Structure, Method and Meaning (New York, 1951). Cf. also idem., "Carnap's Analysis of Statements of Assertion and Belief," Analysis, vol. 10, pp. 97-9, and a review of the Black-White controversy in Journal of Symbolic Logic, vol. 11, pp. 132-3.

9 Fitch, "The Problem of the Morning-Star and the Evening-Star," Philosophy of Science, vol. 16, p. 137; "A Further Consistent Extension

of Basic Logic," Journal of Symbolic Logic, vol. 14, p. 209.

¹⁰ Smullyan, "Modality and Description," Journal of Symbolic Logic, vol. 13, p. 31, and a review of a paper by Quine, ibid., vol. 12, p. 139.

¹¹ See the excellent account of this subject in Wells' paper "Frege's Ontology," this Review, vol. 4, pp. 537-73, also references given therein.

- ¹² For example, functions in the sense of incomplete objects of which nothing can be said; function correlates, which are what we talk about when we try to talk about functions. (I use "object" as a synonym for "entity" and not in the technical sense of Frege's "Gegenstand.") See Wells.
- 13 Wells takes issue with this doctrine; but it has apparently the support of Alonzo Church (conversation with the writer).

14 "Über Sinn und Bedeutung."

- ¹⁶ First propounded by Frege, loc. cit.; in addition to the papers by Frege, Church, Smullyan and Fitch thus far cited, reference should be made to Quine, "The Problem of Interpreting Modal Logic," Journal of Symbolic Logic, vol. 12, p. 43: also his reviews of two papers by Barcan, ibid., p. 95.
- 16 See his review of the Black-White papers mentioned in fn. 8 above. Also a review of a book by Carnap, *Philosophical Review*, vol. 52, pp. 298-304.
 - 17 "A Formulation of the Logic of Sense and Denotation," op. cit.
- 18 Of which little will be heard henceforth. This is not surprising, since the evening-star paradox goes through equally well with "cerise" for "the evening-star" and "the favorite color for sashes" for "the morning-star" throughout, and the formal proof mentioned in 5 below hinges nothing upon the structure of what 'a' expresses.

19 We use this word in Church's sense (Calculi, ch. 1, "Formulation,"

p. 12) rather than in Frege's (Grundgesetze, p. 5).

20 By a propositional function we understand a function whose value is denoted by a sentence. A sentence denotes something different for Church from what it does for Fitch; hence our use of "propositional function" differs in the two ontologies. Reference to Russell's use in Principia Mathematica is nowhere intended.

21 What expressions express.

We tabulate these below:

Expression	What it expresses 23	What it denotes 24
Individual name	[Individual con- cept] ²⁵	Individual
Class 26 name	Attribute	[Class]
Proper 27 function name	[Concept of a proper function] 28	[Proper function]
Sentence	Proposition	[Truth value]
The distinction	hetween the entities	

The distinction between the entities in Columns 2 and 3 may be seen from the following examples: "Truman" and "The President of the United States in 1950" denote the same individual, but express different concepts. The class of gorgons and the class of six-sided pentagons are identical, since their membership is the same, but the attribute expressed

22 The objects of my thought when I think of Charon and therefore (Quine, Methods of Logic, p. 199) also when I think of Charing Cross. See Church "Formulation," pp. 11-12, and (use caution!) Carnap Meaning and Necessity. For sarcasms regarding these read Quine "The Problem of Interpreting Modal Logic."

²⁸ "Express" is used in an intuitive sense which it is of course part of the task of Church's "Formulation" to render precise. A proposition is expressed by a sentence and an individual concept in the sense of the preceding footnote by an individual name. It may be clarifying to point out that it is at least plausible that no two expressions express the same thing (Church "Formulation," pp. 5-7, Fitch "A Further Consistent Extension," p. 212, Rule 3.4).

24 We use "denote" in such a sense that every significant expression denotes exactly one entity and that if "..." is such an expression "..." denotes ..." is true. Observe that the sense of any expression "..." is always denoted by "the sense of '...'" which has a sense of its own and so on ad infinitum. ("Formulation," p. 12, fn. 13.) This is one of the principal objections to the Church-Frege scheme. A class-name denotes a class, not its members.

25 Cf. fn. 22. "Concept" throughout this table is used in Church's sense rather than Frege's: for Frege a concept is a function in the sense of fn. 12 whose value (in the only obvious sense in which such functions have values) is a truth-value. See "Formulation," p. 4; for Church the sense of a name of an object is a concept of that object, and the existence is postulated of concepts analogously related to objects to which we do not happen to have assigned names.

26 We postpone the discussion of relations until section 6 below.

27 I.e., any function which is not a propositional function.

28 "Concept" and "function" as always now in Church's sense. The whole phrase "concept of a function" answers to Church's "operation" in Calculi, ch. 1. by "gorgon" is different from the attribute expressed by "six-sided pentagon." Thus there is only one empty class but there are many empty attributes. Some of these are empty for empirical reasons and some for logical reasons (i.e., because the proposition asserting their non-emptiness is self-contradictory). Two classes which have the same members are always identical but in general two attributes which apply to the same things are not. The function denoted by "double" is the same as the function denoted by "added to itself," but the function-concepts (operations) expressed by these phrases are distinct. Two sentences which are both true or both false denote the same truth-value, but express the same proposition only if they are synonymous.

Fitch rejects all kinds of proper functions and also rejects all extensional entities other than individuals. These rejected entities are bracketed in the table. It will be seen later that these rejections are intimately connected; specifically, were Fitch to accept the existence of proper functions in full generality, together with certain other presuppositions he shares with Frege, Church, and apparently Smullyan, he would be compelled also to accept what we shall refer to as the Church-Frege solution to the evening-star paradox: i.e., the distinction of expression and denotation as distinct relations borne to invariably distinct entities by one and the same significant expression, and the resultant multiplication of beings.²⁹ It seems that proper functions must either stay without the gates or bring in their wake a bevy of little-known acquaintances. It will later be seen that the acquaintance is rooted in kinship.

II

THE PARADOX

It is argued that whatever is, is necessarily self-identical. In particular, therefore, it is true that

- The evening star is necessarily identical with the evening star. By astronomical observation we know that
- 2. The evening star is identical with the morning star.

²⁹ Not mere duplication, but infinituplication! (fn. 24).

But this means that whatever may be truly affirmed of the evening star may be likewise truly affirmed of the morningstar. However, necessary identity with the evening star may, by 1, be truly affirmed of the evening star, whence it may be truly affirmed of the morning star likewise. But this yields the falsehood

The morning star is necessarily identical with the evening star.

The essence of the paradox lies in the following assumption: If x is identical with y, then whatever may be truly affirmed of x may be likewise truly affirmed of y. Two alternatives suggest themselves:

A. The assumption just mentioned is false.

B. 3 affirms of the morning star something which 1 does not affirm of the evening star.

Evidently we must either reject 1, and thus reject modality altogether, for if anything is necessary it is the self-identity of all beings, in the Leibnizian sense that they have those properties which in fact they do have; or we must reject 2 (the course suggested by Quine (cf. fn. 22) and actually taken perhaps by Korzybski 30 and Weiss 31), or else accept 3 32 or A 33 or B. The two schools under discussion agree in accepting B. Indeed they agree on more; both reject the assumption underlying the whole discussion so far: that 1 speaks of the evening star; and 3, of the morning or of the evening star.

³⁰ Alfred Korzybski (Science and Sanity, p. 409) writes "whatever one may say something is, it is not."

³¹ Paul Weiss, Reality, pp. 144-49.

³² This is a curious course. For it would (in all consistency) bind us to accept corresponding solutions of more general forms of the paradox, which purport to show not of the proposition expressed by "the morning-star is the evening-star" but of an arbitrary truth that it is necessary! This would again destroy modality, but by an opposite tendency to that expressed in the rejection of 1; the former would end by making all truths necessary, the latter by making no truths necessary.

³³ A rugged course, involving the rebuilding of logic from the (non-modal) bottom up: but one on which my colleague Prof. R. S. Wells is presently working. See also K. Reach, "The Name Relation and the Logical Antinomies," Journal of Symbolic Logic, vol. 3, p. 97, and R. Carnap, Meaning and Necessity.

III

THE CHURCH-FREGE ANALYSIS 34

On this analysis, an ordinary non-modal sentence like 2 in II speaks of the denotata of its constituent denoting words. Thus if "..." denotes, then

"Any ordinary non-modal sentence containing "..." speaks of ..."

is true. (Any such sentence containing "iron" speaks of iron, etc.) However, in natural languages, a modal sentence, a sentence asserting that so-and-so believes, hopes, fears, etc. that such-and-such is the case, and various other kinds of sentences, do not speak of the denotata of all their constituent denoting words; in particular they frequently speak of the entities expressed by these words (their senses). If a sentence speaks of what is denoted by a word occurring therein, we say the word occurs in its ordinary sense; in the modal and belief cases we say it occurs in its oblique sense.

"Nobody believes that iron floats," for example, does not speak of iron but of the proposition that iron floats. "That iron floats" therefore denotes this proposition, i.e., it denotes what "iron floats" expresses; in general although a word or phrase used in its oblique sense does not denote what it denotes

³⁴ See the works of Church and Frege referred to to fns. 7, 8, 16. 35 Commonly even in a formalized system, there will be signs (parentheses are an obvious example, and variables another less trivial) which denote nothing at all. They do not fail to denote in the way in which "Pegasus" fails to denote, but rather in the way in which the 'sus' of "Pegasus" fails to denote. Such signs are of course exempt from the present discussion. It may be of interest to observe how Church and Frege deal with expressions which do not fall into the above straightforwardly syncategorematic class. They recognize at least three types of sentences which would pre-analytically be said to "speak of nonexistent things": A. "Medusa is a mammal" speaks of Medusa, i.e., of what "Medusa" denotes, i.e., (Grundgesetze, pp. 18-20, "Formulation," p. 14, Meaning and Necessity, pp. 32-39) of the object arbitrarily selected as denotatum of void descriptions, and is true or false according as this object is or is not a mammal. B. "There are no such things as gorgons" speaks of the null class and asserts that it is null. C. "I am seeking for a universal solvent" speaks of the sense of "universal solvent," i.e., what this particular name of the null class expresses.

when used in its ordinary sense, it nonetheless denotes something, namely what the same word or phrase when used in its ordinary sense expresses. In the example chosen the conjunction "that" transforms the expression "iron floats" from a name of what it denotes in its ordinary use ³⁶ to a name of what it denotes in its oblique use or alternatively to a name of what it expresses in its ordinary use.

The same distinction is made in other languages, e.g., Latin, by the use of a mood appropriate to indirect discourse. But there are many cases in which the distinction between ordinary and oblique use is not indicated even by inflection. For example, "I am hunting a lion" does not use "lion" in its ordinary but in its oblique sense, since if "lion" had here its ordinary sense, so would the objects of "I am hunting a boojum" and "I am hunting a common or garden snark," which would thus be naturally equivalent, 37 as they evidently are not. The importance of distinguishing between ordinary and oblique use is indicated by the circumstance that since "I am hunting a lion" does not use "lion" in its ordinary sense it does not mention the class of lions at all and therefore we cannot infer from it a sentence obtained by substituting for "lion" another name of the same entity.

It appears prima facie possible to stop the argument at this point; i.e., to maintain merely that in any rigorously formulated language the oblique use of any expression should be explicitly indicated as such, say by enclosure within []. We would then have a proscription against substituting equals for equals in such contexts.³⁸ The paradox would then be handled in the following way:

³⁶ Namely the False. This part of the Church-Frege doctrine is not immediately relevant to our discussion here, though it follows from the unrestricted acceptance of functions by an argument similar to that mentioned in 5 below. See Wells "Frege's Ontology."

³⁷ In the sense that their material equivalence would be deducible from what we know of zoology. The usage is an extension of Fitch Symbolic Logic (New York, 1952), 11.19-20, 12.24.

³⁸ *I.e.*, we could not infer from --- [... a ...] --- and a = b to --- [...b...] ---, though we could infer from --- [...] --- and [...] = [-.-] to ... [-.-] --- Cf. fn. 33 and the paper of Reach therein cited; also Paul Weiss, "Two-Valued Logic; Another Approach," *Erkenntnis*, vol. 2. pp. 242-61. "A method of substitution is legitimate if it never results in the conversion of a necessary truth into a contingent truth" (p. 251).

Premises:

1) It is necessary that [the evening star is identical with the evening starl. 2) The evening star is identical with the morning star.

Conclusion: None. The first premise does not mention the evening star, therefore although by the second premise whatever may be affirmed of the evening star may likewise be affirmed of the morning star, we cannot use this fact to infer anything about the morning star from the first premise.

But the analysis can be pushed further by requiring that in a formalized language we never use any expression obliquely. This means that if we wish to mention the sense of any expression, we do not use the expression itself within [], but we use another expression which denotes what the given expression expresses. The first premise would now be written.

ele is necessary

where "ele" denotes (ele is) the sense of "the evening star is identical with the evening star." Here it is apparent that no substitution can be made. With like precautions we preserve in every case the validity of substitution of equals for equals (more precisely, the truth-preserving intersubstitutability of expressions which denote the same object).

We have deliberately written "ele" as a complex expression, in which "e" is meant to denote something somehow related to the evening star and "I" to identity. Two questions at once arise: (1) are we forced to admit, e.g., the ingression of e (whatever that may be) into the proposition that the evening star is identical with the evening star and (2) if so, how exactly is e related to the evening star, or I to identity?

It seems that the resolution of such puzzles as that of Wodehouse about Uncle Fred 39 forces an affirmative answer to the first question. Church's answer to the second is that into the sense of any complex expression ingresses the sense of every significant (denoting) part of that expression. For example, the sense of "the evening star" (which is, like the sense of "the morning star," a concept of morning and evening

³⁹ P. G. Wodehouse, Uncle Fred Flits By. "I thought you were younger than you were." "Alas, one is never younger than one is."

star alike) enters in a twofold role into the sense of "the evening star is identical with the evening star," and the sense of "is identical with" in a single role. 40 And by saying that the entities ingredient into the sense of a complex expression are "somehow related" to the denotata of its parts, we mean simply that they are concepts thereof.

As substantiation of the claim that (1) above must be answered in the affirmative if we follow Church thus far, we offer the following analysis of the Uncle Fred puzzle. The sentence "I thought you were younger than you are" is obviously ambiguous. The two possible meanings are more precisely expressed by the following partial formalizations:

- I. I thought there are real numbers x and y such that x is less than y and you are x years old and you are y years old.
- II. There is a real number x and a sense y such that y is a concept of x and I thought you are y years old and there is real number z such that x is less than z and you are z years old.

The italics ⁴¹ in I indicate that the sense of "there are ... old" is being spoken of (that the italicized expression denotes that sense) and therefore also the senses of such parts of "there are ... old" as are categorematic (not the variables). The italics in II also indicate that a sense is being spoken of, but their role is more complicated. We cannot say that the sense of "you are y years old" is being spoken of, since expressions containing a free variable like "y" have no sense. ⁴² What is being spoken of is what I thought, *i.e.*, a proposition into which ingressed you, the sense of "have as age in years" and not the concept of y but y itself (a concept of the real number x). We do not

⁴⁰ "Ingression" is here meant in such a sense that e.g., to say that the sense of "president" ingresses into the sense of "Truman is president" is to say that a certain concept of president (the unique sense of "president") is a function which makes of a certain concept of Truman (the sense of "Truman") the proposition that Truman is president. In this way the senses of individual names and sentences (and names of ... of names of senses of these) are taken as basic, and senses of adjectives, verbs, etc., regarded as derivative therefrom.

⁴¹ Italicization plays here the role of the subscript "1" in Church's "Formulation."

⁴² For the same reason we cannot say that the sense of "you are x years old" is being spoken of in I.

italicize "y" because it is y itself and no concept thereof which ingresses into the mentioned sense. To resolve this paradox, we have to regard the sense of a sentence as a function of the senses of its parts, i.e. to admit complexity and ingression of senses.

We conclude this section by remarking that the Church argument, once accepted thus far, compels acceptance of an infinite hierarchy of senses of expressions denoting senses of expressions denoting

Church's own statement is simple and direct. He says: "The hierarchy of concepts of successively higher orders arises as soon as we suppose that a concept, like anything else which can be discussed at all, is capable of having a name given to it. For the sense of a name of a concept is a concept of the next higher order, and so on". 43 In the immediately following passage he refutes the attempt to halt the hierarchy at any point.

IV

THE FITCH-SMULLYAN ANALYSIS 44

On this analysis, the relations of expression and denotation are identified. It is therefore not possible to handle the evening-star paradox by asserting that "the evening star is necessarily identical with the evening star" does not speak of the evening star but of the evening star, a concept of evening and morning star alike. There will be for Fitch and Smullyan no such thing as a concept of any object over and above the object itself. The latest form of the theory 46 may be expressed briefly as follows.

^{43 &}quot;Formulation," p. 12, fn. 13.

⁴⁴ See the references given in fns. 9, 10, 37; also "A Definition of Logical Truth," paper read before the Association for Symbolic Logic at its Bryn Mawr meeting, December 28, 1951. An abstract appears in the Journal of Symbolic Logic, March 1952.

⁴⁵ In the case of individuals, this results in the disappearance of the concept ("The Problem...," last sentence); in the case of classes, in the disappearance of the (extensional) object and its replacement by the concept (the attribute).

⁴⁶ In the Bryn Mawr paper (fn. 44 above).

I. There are two kinds of entities, individuals and universals.

II. In an ideal language every entity has exactly one name. 47

III. Universals are classified according to degree. A universal of degree 0 is a proposition; of degree 1, an attribute ⁴⁸; of degree 2, 3, 4, a dyadic, triadic, tetradic relation, etc.⁴⁹

IV. The only composite entities (i.e., entities into which other entities ingress) are propositions.⁵⁰ A proposition has the form R(x) or R(x, y) or R(x, y, z) etc. where R is an attribute or a dyadic or triadic relation etc., and x, y, z, \ldots are entities of any kind whatsoever ... individuals, propositions, attributes or relations.

V. In an ideal language the name of an entity occurs in the name of another entity just in case the former ingresses into the latter, and will occur n times in that name just in case the former ingresses in an n-fold role into the latter. Therefore the only complex names are the names of propositions.⁵¹

⁴⁷ Symbolic Logic, section 19. An apparent exception is discussed, loc. cit., and is resolved in the Appendix on Combinatory Operators. Of course this doctrine is diametrically opposed to that of Church, for whom all true sentences denote the same thing.

⁴⁸ Fitch, "Actuality, Possibility and Being," Review of Metaphysics, vol. 4, pp. 367-84, especially p. 368.

⁴⁹ We shall return to the problem of relations in section 6 below.

⁵⁰ Here the Bryn Mawr paper diverges sharply from the doctrine of Symbolic Logic. In the latter there are but fifteen simple logical universals, from which others are built up and which ingress into those others. Function and argument ingress into value; the terms of a pair ingress into that pair; a universal occurring in the definition of another ingresses into that other. The first two cases are ruled out in the Bryn Mawr paper by the rejection of functions and pairs respectively, the last by the admission of infinitely many simple logical universals none of which ingress into any other. Thus e.g., neither difference nor identity ingresses into difference from identity.

 $^{^{51}}$ Principle V holds in the book too, but since ingression is there regarded as a much more widespread phenomenon than in the paper, the expressions of the book are much longer and more complex. This makes them more appropriate for mathematical purposes; nearly all the propositions of mathematics in the Bryn Mawr system have the form A(B), where neither A nor B are capable of further analysis.

It follows from II that "the evening star" and "the morning star" cannot both be names of the same object. More generally, it follows that "a = b" can only be true if "a" and "b" are the same expression. Nonetheless, it is not desired to differentiate between the morning star and the evening star; yet if we do not identify them, we are forced to admit their diversity. But then we must admit that "the morning star is identical with the evening star" is not expressed in an ideal language in the sense of II and V; hence we must paraphrase it in such a way that diversity of referent is matched exactly in diversity of symbol.

The technique employed is Russell's theory of description. By V, the name of an individual must be simple; hence "the evening star" and "the morning star" must not be names at all. Descriptions do not occur in ideal languages; they suggest the ingression of universals into individuals, contrary to IV. Hence we first paraphrase "the evening star," and "the morning star" as "the hesperescent object" and "the phosphorescent object" and then rewrite sentences containing these descriptions in the Russell fashion.⁵³

Then "The evening star is necessarily identical with the evening star" becomes one of two 54 things:

A. It is necessary that there is exactly one hesperescent object, and that it is self-identical.

B. There is exactly one hesperescent object, and it is necessary that it is self-identical.

Now A is false, so we need not be disturbed if paradox flows from it. B on the other hand is true; but however we state 55 the premise "The morning star is identical with the evening star" it does not validate the inference from B to

⁵² Symbolic Logic, 19.6.

⁵⁸ Cf. "The Problem...," p. 138, and Smullyan's review of Quine referred to in fn. 10 above.

⁵⁴ A is (6) of "The Problem...," p. 139; B is (9). Other readings are possible, but they are all either false or non-paradoxical.

⁵⁵ I.e., however we fix the scope of the description operator.

C. It is necessary that there is exactly one hesperescent and exactly one phosphorescent object, and that they are identical.

but merely to the harmless 56

C'. There is exactly one hesperescent and exactly one phosphorescent object, and they are necessarily identical.

Hence the paradox vanishes.

V

THE KINSHIP OF FUNCTIONS AND SENSES

It can be shown that granted certain elementary principles of logic, on which the two schools do not disagree, the acceptance of proper functions in full generality leads to the distinction of expression from denotation and this to the whole Church hierarchy. The proof is a detailed and technical affair which is hardly in place in the present paper. The only principle involved which would seem to invite criticism is the substitutability of equal for equals. It follows that we must either:

- I. Reject the existence of proper functions, or
- II. Reject the substitutability of equals for equals, or
- III. Accept the infinite hierarchy of Church.

We have examined in this paper the first and third alternatives. The second is a more rugged course than is usually supposed. For "a = b" on both ontologies is true just in case a and b have all their properties in common. If we accept this, course II would involve saying that the inference

a has all properties which b has

a has the property F

therefore, b has the property F

is invalid. On the other hand if we reject Leibniz' definition of identity we must either say that sometimes a and b are identical while their properties are different, or that sometimes they are different while their properties are identical. Either course would involve a wholesale reconstruction of logic. In the writer's opinion it would entail the rejection of logic too.

⁵⁶ Harmless in view of 23.6 of *Symbolic Logic* which says that the result of joining by an identity sign two *names* of (not descriptions of) the same thing denotes a necessary truth.

VI

RELATIONS AND THE COMPLEXITY OF UNIVERSALS

To sum up: The ontology of Church and Frege differs in two important respects from that of Fitch and Smullyan. The former countenances proper functions while the latter does not; the former makes a distinction between expression and denotation while the latter does not. As a result, both have a somewhat unnatural appearance; the former asserts, while the latter denies that "The president of the United States is a Democrat" mentions the president of the United States; ⁵⁷ the former denies, while the latter asserts, that "I am hunting for a lion" mentions lion. The latter is unquestionably more economical; but its *two* economies are not independent. However, once functions are explicitly rejected, as they are by Fitch, there seems no compelling reason to instate the Church hierarchy in order to handle the expression of intensional ⁵⁸ relations and attributes.

There remain two connected points on which obscurity must be dispelled; first, the treatment of relations in the two schools: second, the simplicity and complexity of abstract entities. It will be convenient to deal with these together.

I. There have been at least three accounts, in the history of symbolic logic, of the nature of relations. Consider the sentence "John is the father of Peter." On the first account, the sentence is not in the subject-predicate form but in the form "R(x, y)" which is not capable of reduction to subject and predicate. We may call this the simple theory of relations.

On the second, the subject is "John" and the predicate "father of Peter." We may call this the combinatorial theory of relations. 60

⁵⁷ On Fitch's analysis it mentions the attribute of being president of the United States. On Church's analysis the second example mentions the sense of "lion," i.e., lion rather than lion.

⁵⁸ Relations like belief, attributes like possible.

⁵⁹ The sentence whose subject is "John" and whose predicate is "father of Peter" would express a different but logically equivalent proposition.

⁶⁰ So-called because of its use in combinatorial (variable-free) logic. Cf. M. Schönfinkel, "Uber die Bausteine der mathematischen Logik," Math. Annalen, vol. 92 (1924), pp. 305-316.

On the third, the subject is the ordered pair "John; Peter" (an entity of which varying accounts 61 are given), and the predicate "father of." We may call this the pair theory. 62

II. Church accepts the combinatorial theory and could also accept the pair theory. The details of his system would make the former fundamental in that the explanation of relations as predicates of pairs would already presuppose relations in the sense of the combinatorial theory. (For instance, Frege's definition of a pair a; b is the class of all relations which relate a to b, where relation is taken in its combinatorial sense. Other definitions of pair present the same difficulty).

There are therefore two abstract entities in Church's system which might with equal propriety be called the (extensional) relation of fatherhood; one (the more basic) of the category of proper function ⁶³ and one of the category of class (cf. the table in 1). As a matter of fact only the former are called relations in Church's writings.

The simple theory of relations is not even expressible in Church's notation, which he so devised that every sentence has a unique subject and a unique predicate (of course either may be complex) and nothing else.

III. If with Church and with Fitch one accepts the principle that a sentence speaks of the denotata of its parts, the following corollaries may be derived from I.

On the simple theory, "John is the father of Peter" speaks of John, Peter and paternity. This is in accord with common sense in so far as common sense is willing to hypostatize paternity.

On the combinatorial theory there are three possibilities.

⁶¹ For a classical account see Quine, Mathematical Logic (New York, 1940), p. 198. Fitch's system of Symbolic Logic is forced to take it as unanalyzed, for the togetherness of subject and predicate is itself a pairing relation (section 15 fn.), so that every proposition and in particular any proposition which made an attempt to explain what a pair was, would presuppose pairs.

⁶² If pairs are not primitive, at least some relations (viz., those mentioned in the definition of pairs) have to be treated by one of the other techniques. Quine avoids this difficulty by making them syncategorematic.

⁶³ Making the individual Peter into the class father of Peter.

- A. The predicate "father of Peter" denotes a simple universal.⁶⁴ On this basis "John is the father of Peter" does not speak of Peter.
- B. The predicate "father of Peter" denotes a complex universal into which Peter ingresses. "Father" then denotes a function whose value is a class.
- C. The distinction between simple and complex properties is meaningless and one cannot tell from the name of a property what ingresses into it. The whole notion of ingression is to be rejected.
- IV. We may now clarify our earlier remarks on ingression (fn. 40) and also Church's position on IIIC.

According to Church, the subject-matter of any expression, e.g., a sentence, is a function of its sense; according to Fitch, of its denotation. On Church's Alternative (0) no two expressions have the same sense. Hence, given the sense, one can determine the expression uniquely (if there is one); one can then determine the expressions constituting the given expression (also uniquely) and their senses in turn uniquely. Since the three determinations are unique, there is an objective relation of ingression between the senses. The word "ingression" is not Church's. In Fitch, the situation is simpler. There is a one-toone correlation between expression and object. Hence (because the determination of expression from object, sub-expressions from expression and ingredient from sub-expression are all again unique), the relation of ingredience is once more objective. In Church, only senses have ingredients in our sense. In Fitch, the designata of any complex expressions do.

In Church, the subject-matter of an expression S= what the senses of the parts of S are concepts of. In Fitch, and Church, it = what the parts of S denote.

In Church, ingression is the relation between the sense of part of an expression and the sense of the whole. In Fitch, it is the relation between the denotation of part of an expression and the denotation of the whole.

⁶⁴ In the Bryn Mawr paper, Fitch accepts this analysis along with the simple theory. The two analyses give two distinct but logically equivalent propositions.

We speak of entities as complex (e.g., in III above) when entities other than themselves ingress into them. In Church, senses are complex but there is no reasonable sense in which anything else can be said to be complex (or simple); for example, a class cannot significantly said to be either complex or simple, but there may be several factually equivalent criteria (concepts of the class, senses of its various names) in virtue of which we classify things in that class, and of these some may well be in an objective sense simpler than others. Only intensions can be ordered in point of complexity. For Fitch, there are (outside individuals) only intensions; hence (outside individuals) everything can be so ordered.

We are now in a position to state accurately Church's position on IIIC. If by "property" we mean (extensional) class, it is true as it stands; if we mean attribute (sense of a name of a class), it is false. Some concepts of the evening star involve a concept of the evening, but there is no sense in which the evening star involves the evening.

JOHN MYHILL

Yale University.



Announcements

The Philosophy of Education Society has established a Committee on Information Service: Vacancies and Available Personnel, to assist the profession in the placement of candidates for positions in Philosophy and History of Education and related areas. Interested persons should write to Dr. Louise Antz, New York University, New York 3, N.Y. The Philosophy of Education Society, a professional association, is distinct from the Philosophy Education Society, Inc., publishers of this **Review**.

Attention is directed to the journal Studium Generale, published by Springer-Verlag, Neuenheimer Landstrasse 24, Heidelberg, Germany. Now in its fifth year of publication, and appearing now at intervals of about one month, Studium Generale is devoted to investigating the unity of knowledge by abandoning sharp distinctions among specialized disciplines.

The following officers were elected at the annual meeting of the Southwestern Philosophical Conference on 28 December 1951: President, Edward S. Robinson; Vice-President, Carlton W. Berenda; Secretary-Treasurer, Ian McGreal; additional members of the Executive Committee, James S. Fulton, Robert L. Rein'l, Millard Scherich.

In September 1952 the Congrès des Sociétés de Philosophie de langue française will meet at Strasbourg. M. René Hubert, Rector of the University of Strasbourg, will preside. The theme of the congress is "Man and History."

The following officers were elected at the annual meeting of The Metaphysical Society of America, held at Yale University on 22 March 1952: President, Paul Weiss; Secretary, Oliver Martin; Treasurer, Constantine Cavarnos; additional member of the executive council, John Wild.

Louis O. Mink, of Yale University, has been appointed assistant professor of philosophy in Wesleyan University, and has resigned as managing editor of The Review of Metaphysics.

Irwin C. Lieb of Yale University has been appointed managing editor of The Review of Metaphysics as of 1 July 1952. Correspondence with the managing editor should still be addressed to 202 Linsly Hall, Yale University, New Haven, Conn.

CORRIGENDUM

In the article, "The Doctrine of Necessity Re-examined," by Milic Capek (Vol. V., No. 1, September 1951), on page 30, the third line from the end of Section II, the phrase "...if not consciousness where it is usually located,..." should read "...if not in consciousness where it is usually located,...".

- G. T. Bellhouse: Immortal Longings. New York: Philosophical Library 1951. 128 pp. \$2.75.
- Les Etudes Bergsoniennes, Vol. III. Raymond Polin, Pierre Andreu, Lydie Adolphe, Henry Mavit. Paris: Editions Albin Michel, 1952. 224 pp. 330 fr.
- Seven More Poems by Nicholas Bozon. Translated by Sister M. Amelia (Klenke). St. Bonaventure, N.Y.: The Franciscan Institute, 1951. 162 pp. \$2.00.
- William Bryar: St. Thomas and the Existence of God. Chicago: Henry Regnery Co., 1951. 252 pp. \$5.00.
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- Galeni Compendium Timæi Platonis. Edited by Paul Kraus and Richard Walzer. (Corpus Platonicum Medii Aevi; Plato Arabus, Vol. I.) London: The Warburg Institute, 1951. 151 pp. £2.7.6.
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- Alberta Hilands: You, A Self-imprisoned Master. Boston: The Christopher Publishing House, 1951. 144 pp. \$2.00.
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- The Great Ideas: A Syntopicon of Great Books of the Western World (Vols. I and II of the Introductory Volumes to Great Books of the Western World), edited by Mortimer Adler. Chicago: Encyclopædia Britannica, Inc., 1952. 1088 and 1345 pp.
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